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ABSTRACT

The papers in this volume were commissioned to provide information useful for planning, implementing, and assessing the impact of new teacher programs, such as the Illinois Initial Year of Teaching Program. These papers were presented at a conference held at the University of Chicago in September 1987 on the initial year of teaching to provide a set of position statements about beginning to teach. Titles and authors include: (1) "State and District Structures to Support Initial Year of Teaching Programs" (Beatrice A. Ward); (2) "Workplace Conditions of Teacher Quality and Commitment: Implications for the Design of Teacher Induction Programs" (Susan J. Rosenholtz); (3) "The Role of Higher Education in Initial Year of Teaching Programs" (Kenneth R. Howey and Nancy L. Zimpher); (4) "Learning the Language of Practice: Implications for Beginning Year of Teaching Programs" (Robert J. Yinger); (5) "The Process and Content of Initial Year of Teaching Programs" (Kathy Carter and Virginia Richardson Koehler); (6) "On Helping the Beginning Teacher" (Nathalie J. Gehrke); and (7) "Assessment Issues in Initial Year of Teaching Programs" (Susan Barnes). The final paper, "A State Program for the Initial Year of Teaching" (Gary A. Griffin), offers a set of recommendations drawn from the conference. A list of educators invited to the Initial Year of Teaching Conference is included. (CB)

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THE FIRST YEARS OF TEACHING:

Background Papers and a Proposal

Edited by
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In cooperation with
The Illinois State Board of Education

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PREFACE

There is widespread reawakened concern with the quality of schools in the state and the nation. This concern, quite naturally, includes considerable attention to teachers: their effectiveness, their preparation, and their commitment to their important work. Although teachers and teaching have been taken for granted in our society for a number of years, it is increasingly clear that this condition can no longer prevail. We must take more seriously the character and quality of our teaching force.

This volume considers the new teacher, the novice professional who enters the complex world of schools and classrooms upon completion of a teacher preparation program in a college or university. Until recently, it was assumed that this newcomer would require only modest assistance before assuming full responsibility for helping learning to happen. However, research over the past decade has convinced many of us that this simple assumption about how a student of teaching becomes a full-fledged teacher is grossly inadequate. Although it is comforting to invest full confidence in the first-year teacher, it is seldom that this confidence is warranted. Men and women new to teaching, although modestly familiar with the work of teaching, are still learning about it. New teachers may have a small supply of "lessons learned," but these lessons are seldom easily adapted to an unfamiliar and unsupervised situation. New teachers may have some insights into how schools go about their business, but, as in all complex human organizations, schools can be impenetrable to the relative outsider. And, the demands of teaching must be fully experienced in order to be mastered. Few, if any, teacher preparation programs provide that requisite experience.

We have learned that many new teachers leave teaching during their first years. Some leave because they discover, too late, that work with children and youth does not suit them. Some leave because they are disappointed with the monetary rewards. A large number leave because they simply cannot gain mastery over teaching due to the conditions of their entry into the profession. These conditions include isolation from senior colleagues, vague relationships with school administrators, classrooms with an overrepresentation of students who are unwilling to learn, schedules that require multiple preparations, few opportunities for participation in the goal-setting and implementation activities of the school, and an absence of ongoing assistance in continuing to learn to teach.

In addition to thinking about first-year teachers from the perspective of newcomer, it is important to acknowledge that local districts and state departments of education have recognized that it is important to verify that the new members of the teaching force are sufficiently accomplished to remain in teaching. Although teacher certification has traditionally been granted to persons who successfully complete a higher education teacher preparation program, the relative absence of systematic evidence about whether those persons are truly on the road to excellence has become troubling. Policy makers, the educational community, and lay citizens alike have recognized the desirability of a more rational entry into teaching, an entry that has as one component the demonstration by the new teacher that he or she is, indeed, qualified to teach and deserving of state certification.

A number of states have attempted to deal with these issues through the implementation of new teacher programs that must be completed before full teacher certification is granted. In some instances, the programs are designed almost exclusively as tests of teacher competence. In these programs, it is necessary that new teachers satisfy certain criteria in their teaching performance and professional behavior. In other programs, the primary emphasis is upon assisting the new

teacher, through a variety of educational opportunities, to gradually and successfully assume teaching responsibility. In a few others, a balance is struck between, on the one hand, ensuring that the new teacher has at his or her command a set of desirable teaching practices and, on the other, helping the teacher gain control over these practices and move ahead toward greater effectiveness.

The Illinois State Board of Education commissioned the work in this volume as one component of an exploration of the desirability of moving ahead with an Illinois Initial Year of Teaching Program. The papers included here were written by recognized national experts with the express purpose of providing appropriate information for the discourse and debate that accompany any large-scale innovation. The topics of the papers are ones that have been shown in other states and regions to be of importance in planning, implementating, and assessing the impact of new teacher programs. They provide a set of position statements about beginning to teach that should be useful as the discussions move forward. All but the last paper were presented and discussed at a meeting of Illinois educators and policy makers, held at the University of Illinois at Chicago in September of 1987. The last paper provides a set of recommendations that emerged from the more substantive papers and the content of the September discussion. The recommendations do not point toward the specifics of an Illinois Initial Year of Teaching Program; they provide a framework for deliberation, collaboration, investigation, and experimentation.

It is clear that the first years of a teacher's career are crucial to his or her decision to remain in teaching, to demonstration of subsequent success, and to a commitment to continue to learn to teach throughout a career. The position taken here is that thoughtful investment in those initial years of teaching practice should be a high priority of the state.

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ACKNOWLEDGEMENTS

This volume is the result of the work of a number of professionals, each of whom contributed to one or more phases of its development. The initial decision to move ahead was made by Superintendent of Instruction Ted Sanders, who has again demonstrated his understanding of the necessity to provide solid intellectual underpinnings to educational policy. Susan Bentz of the Illinois State Board of Education provided guidance for the process from the beginning and has been consistently helpful and understanding as it moved ahead.

The authors of the papers were generous with their advice and their expertise, and demonstrated high standards of scholarship from the preparation of first drafts through presentations to Illinois stakeholders to the submission of final copy. They have made a valuable contribution not just to deliberations here in Illinois, but also to the growing body of literature concerned with new teachers.

A number of Illinois policy makers and educational professionals convened at the University of Illinois at Chicago in September of 1986 for the purpose of learning the contents of the papers presented here and to provide valuable and insightful responses to the authors and to State decision makers. Their participation was particularly helpful to the preparation of the broad recommendations included here as the last paper in the volume. (See list of persons invited.)

Several UIC colleagues helped to make this project especially enjoyable. Suzanne Millies provided editorial assistance in the production of the papers and was instrumental in overseeing the details of the September meeting. Lauren Sosniak provided advice during the initial conceptualization of the project and continued to be insightful as the discussions proceeded. Mari Koerner helped to plan the September sessions and offered her technical assistance during the tedious proofreading stages of manuscript production. Judith Ponticell and Patricia Hulsebosh chaired two of the discussion groups of Illinois stakeholders, as did Ms. Koerner and Ms. Millies.

Christine Oderinde, in her usual calm and efficient way, provided invaluable assistance in coordinating the arrangements, invitations, reservations, and correspondence associated with the project.

STATE AND DISTRICT STRUCTURES TO SUPPORT INITIAL YEAR OF TEACHING PROGRAMS

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The initial year in which an individual is given responsibility for the education of children and youth is regarded as a difficult time by many teachers (Hoffman et al., 1986). Few preservice teacher education programs prepare teachers for the changes in responsibility, time commitment, and isolation that occur in a typical school when they move from being trainees to teachers (Fox & Singletary, 1986). No matter how excellent, preservice programs provide only exposure to and practice in the use of teaching competencies (Borko, 1986; Clark et al., 1985). Thus, it is not surprising that novice teachers seldom possess all the qualities and capabilities of the ideal teacher (Copeland, 1986).

Nonetheless, surveys and other studies of experienced, effective teachers show that these individuals attribute much of their later success to their initial years in the classroom. Their decisions to remain in the profession are related to the quality of their initial teaching experiences (Holmes Group, 1986; Chapman, 1984).

This being the case, it is important to explore and to implement state and school district structures which (a) build upon realistic expectations for novice teachers' performance and (b) provide the support and training necessary to further their development of the knowledge, skills, insights, and perceptions of teaching which exemplify an ideal teacher. That is, structures are needed to develop teachers who are competent in the subject areas they teach and who are expert in management of the social system in which classroom-based instruction takes place. Such teachers also are proficient in adapting classroom instruction to fit students with diverse learning needs. They use observation and analysis skills, study what occurs as they teach, and apply this information to improve instruction in their classrooms. They seek opportunities to participate in school improvement, teacher training, curriculum development, and other professional development efforts that extend beyond their own classrooms (Griffin, 1986; Ward, 1986).

The purpose of this paper is to explore several structures that have promise for supporting development and installation of initial year of teaching programs that will build and sustain such ideal teachers. Selection and formulation of the proposed structures have been influenced by research on effective teaching, effective teacher training, school-based staff development, and knowledge production and utilization in education. Recent reports on teachers and the teaching profession have also been considered.

The discussion begins with a brief view of the knowledge base regarding initial years of teaching. Attention then is given to recommended areas of action.

Knowledge That Should Apply in State and School District Structures Supporting Initial Year of Teaching Programs

Recent reports of research on preservice and inservice teacher training and on induction of beginning teachers into the teaching profession provide information about the characteristics of novice teachers, the sorts of programs that aid their transition to effective teaching, and the structures that undergird these programs. In brief, the findings suggest that:

1. Beginning teachers are not ready to be full-fledged teachers regardless of the preservice program they go through (e.g., Borko, 1986; Copeland, 1986; Fox & Singletary, 1986; Clark et al., 1985; Druva & Anderson, 1983).

2. No matter how well trained, individuals suffer "reality shock" when placed in classrooms as the sole person responsible for the education of some 30 students. Incorrectly handled, the impact of this experience may wash out any skills and knowledge prospective teachers learn in formal college training (e.g., Borko, 1984; Veenman, 1984).

3. Responsibilities assigned to beginning teachers should recognize the differences in knowledge, skill, and commitment across these teachers. Successful completion of an induction period should be required before individuals are granted teaching credentials (see Clark et al., 1985; Schlechty, 1985; Evertson et al., 1985; Gray & Gray, 1985; Edwards, 1984; Veenman, 1984).

4. Much can be learned from the state-level reforms in teacher credentialing and teacher induction that have taken place during the last five years. At their worst, these programs provide one more set of things for novice teachers to do in addition to the demands of first-year teaching. At their best, the programs assure early and sometimes frequent contact between beginning teachers and others in the educational context. Most significant among these contacts is work with a peer or support teacher. Use of the programs as a screening device for entry into the profession is questionable inasmuch as nearly all teachers are recommended for certification at the end of their first year. (For example see, Hoffman et al., 1986; Zeichner, 1986; Cornett, 1985; Edwards, 1984).

5. Whatever new programs are developed, teachers' initial teaching experiences should promote their becoming analytic/reflective teachers who question, explore, and test their approaches to instruction in order to assure that all students learn (see Griffin, 1986, and Copeland, 1986).

6. Successful induction into the teaching profession requires collaboration among teachers, administrators, university professors, and state department of education personnel. Such collaboration should occur throughout all stages of initial year programs——planning, testing, implementation, evaluation, and specification of policies, rules, and procedures (e.g., Ward & Griffin, 1986; Ward, 1985).

7. Improvement in teachers' initial year(s) in teaching should be accompanied by changes in other aspects of schools and the teaching profession. These include the administrative and professional structure and climate of the school and the duties and responsibilities assigned both to beginning and experienced teachers (e.g., Borko, 1986; Huling-Austin, 1986; Carnegie, 1986; Holmes Group, 1986).

Clearly, programs focusing on the initial years of teaching would be well-advised to attend to this knowledge base. Program developers also should be mindful of the recommendations recently advanced by several state and national advisory groups and the two major teacher organizations concerning teachers and the teaching profession. These groups suggest ways in which the profession can respond effectively to the forthcoming changes in the composition of the teacher workforce. They propose actions that capitalize upon the expertise and interests of experienced teachers to provide the novice teachers the support and training they need.

For example, the Holmes Group, the Carnegie Forum on Education and the Economy, and the California Commission on Reform of the Teaching Profession have proposed ways to improve the teaching profession. The American Federation of Teachers and the National Education Association passed resolutions concerning excellence in the teaching profession at their 1986 national conventions.

All these groups acknowledge that beginning and expert teachers differ in the knowledge and skill they possess. All recommend that entrance to the teaching profession be based on more than completion of a series of university courses and a brief practice teaching assignment. Examinations are proposed as a requirement for entry to and exit from preservice training by some groups. Successful completion of an induction period prior to granting full rights and responsibility as an independent professional is urged. Placement of greater responsibility in the hands of the teaching profession for assessment of persons' qualifications for particular credentials is advanced. This goes as far as a recommendation by the Carnegie Forum that a National Board for Professional Teaching Standards be established.

All the groups also recommend that teachers grow and progress in the scope of professional activity and responsibility they assume as their knowledge and expertise increase. Lead teacher, advanced certificate teacher, certified teacher, resident, and intern positions are recommended by the Carnegie Forum. The Holmes Group delineates career professional, professional teacher, and instructor responsibilities. Professional development schools, clinical schools, training schools (whatever term is used) in which novice teachers complete internships, residency, and induction are also proposed.

As important and useful as these recommendations are, they also pose dilemmas. Novice teachers are described as persons who need help with the immediate demands imposed by their assignment to particular schools and classrooms; at the same time, we are told that new teachers should engage in training that builds analytic/reflective teachers who are not context bound. Getting through each day is seen as a requirement that may negate application and use of whatever knowledge about effective teaching beginning teachers may have acquired during their preservice education. Yet, to be excellent, these same teachers are expected to become skilled in testing and validating the usefulness of new knowledge within the confines of their schools and classrooms.

Thus, initial year of teaching programs are challenged to assure that novice teachers build satisfactory ways to meet the day-to-day demands of their initial years of teaching and at the same time acquire an ever expanding view of their role as teachers. To achieve this end, action is recommended in three areas:

1. Provision of two types of training and services for novice teachers: One focusing on adjustment to the complex world of teaching in the schools and classrooms to which they are assigned; the other emphasizing acquisition of the skills, knowledge, and perceptions of the teacher's role that exemplify an ideal teacher;

2. Implementation of inter-institutional arrangements that encourage and support collaborative design and implementation of training and support services that are based on the latest knowledge about effective teaching and that promote teachers' use of this knowledge as they teach;

3. Development of standards to guide the design and implementation of initial year of teaching programs and the movement of novice teachers to regular, full time teaching responsibilities.

Structures are proposed below that support action in these three areas.

Novice Teacher Training and Support Services

Interviews with novice teachers and study of novice teachers' experiences as they enter the classroom indicate that unless special structures are established to provide the training and support they need, novice teachers are left to fend for themselves. Zeichner (1986) pointed out that teacher training seems to be everyone's issue but no one's priority. Veenman (1984) noted that one impediment to implementation of effective teacher induction programs was public response that is embedded in competency tests but not training. Ward and Griffin (1986) found that state level reforms included directives as to the skills and knowledge a teacher must possess but few stipulations regarding the improvements that should occur in teacher preparation in order to assure development of this teacher competence.

To increase the likelihood that teachers will receive the training and support they need during their initial years in teaching, two state and school district structures are proposed. They are (a) mentor teachers and (b) teacher development schools.

Structure 1: Mentor Teachers

The importance to novice teacher success of work with an experienced classroom teacher has been emphasized by many research studies. Hoffman et al. (1986) identified the peer teacher as a key feature of induction programs. In Georgia, novice teachers paired with a "buddy" teacher were more successful than those who did not receive such support (Tanner & Ebers, 1985). Gray and Gray (1985) reported that 92 percent of new teachers do not seek help, except through informal sharing of experience unless they are required to do so. Yet, those who receive peer support are more effective teachers than those who do not. Schlechty (1985) stated that effective induction systems relied greatly on intensive clinical supervision, demonstration, coaching, and constant corrective feedback by real practitioners in real situations.

To this end, provision of mentor teachers is an important component of an initial year of teaching program. Such teachers can be made available through a local school district effort or a statewide program. Programs underway in Toledo, Ohio and several other locales provide models for school district efforts. The California program is a workable version of a state level effort.

Although these and other programs that have been initiated to date have not been limited to work with teachers in their initial years of teaching, the mentor teacher role is well suited to provision of the practical and psychological support novice teachers need (Hoffman et al., 1986).

Mentor teachers offer both informal and formal assistance to novice teachers. Informal assistance includes corrective feedback as well as ideas and advice. Formal assistance involves training activities specifically intended to build novice teachers' effectiveness in classroom instruction. Mentor teachers conduct demonstration lessons, perform observations in novice teachers' classrooms, and coach the novice teachers.

Mentor teacher assistance to novice teachers is most successful when each novice teacher in a school is assigned a single experienced teacher to serve as his/her primary support person. This assignment lasts for a minimum of one full school year unless intervening circumstances suggest that a change is desirable. More successful pairings of mentor and novice teachers bring together teachers who teach at the same grade level or in the same subject matter area (Gray & Gray, 1985).

More effective mentor teachers complete training in how to work effectively with adults prior to their assignment to one or more novice teachers (Kent, 1985). They are released from their regular classroom responsibilities for part of each day of the week so they can assist the novice teachers during regular school hours (Hanes & Mitchell, 1985).

The ways in which mentor teachers are selected and the rewards they receive for the time that is devoted to preparing for and conducting mentoring duties beyond the regular school day are other aspects of mentor teacher programs that have been found to be important to their success. Mentor teacher selection that is considered fair and objective gains support for the mentoring activities from all teachers in a school. Selection of teachers who are viewed as experts by their peers adds to the mentors' success. Released time or reimbursement for added responsibilities maintains enthusiasm for the role.

Given that requirements of the sort listed above are met, mentor teachers can furnish the day-to-day assistance that is so important to successful induction of novice teachers. They also can employ analytic/reflective procedures that will encourage novice teachers to consider and to respond appropriately to the complexities of classroom instruction.

Structure 2: Teacher Development Schools

Teacher development schools are proposed as a mechanism for induction of novice teachers because such schools foster attention to more than survival during teachers' initial years in teaching. Teacher development schools provide a setting for instilling in novice teachers the planning, classroom management, and teaching skills that are the basic tools of instructional effectiveness and, then, for moving on to build the skills, knowledge, and perceptions of teaching that typify an ideal teacher. They also can serve as vehicles for generating changes in the larger context (e.g., schools, school districts, and universities) that are needed to increase teachers' effectiveness at all stages of the teaching career, preservice through work as a lead teacher or career professional. What is more, assignment of new teachers to these schools eliminates their placement in settings where they would be apt to fail; that is the schools, classrooms, and courses that are the most complex and difficult in a school district and are the ones in which "the new person on the block" often is placed.

Teacher development schools are regular, operating public schools that have been designated as sites in which both education of children and youth and teacher training are carried out. Use of regular schools is intentional. Conduct of teacher training in a real world setting and avoidance of the high mindedness and protected environment that became part of many university laboratory schools during the 1940's and 1950's are considered essential to the schools' success.

As proposed here, the schools' teacher training efforts would emphasize training of teachers who are in their initial years of teaching. However, the schools also might serve as sites for training mentor teachers, training experienced teachers in curriculum development and research methods, and conducting preservice training.

In a large school district or in a region composed of smaller school districts, one or more public schools would be designated to serve as a teacher development school for the entire area. To be

considered, a school should already have in place the features that have been identified as representative of an excellent school (for example, see Ward, 1984). If possible, the school should also serve a diverse student population and be large enough to provide multiple classrooms at each grade level or in each subject matter area.

Operation of the teacher development schools' regular education programs would be under the direction of the school districts in which they are located. The schools' training efforts would be directed by school district-university collaboratives. (See the next section of this paper for more information about the collaboratives.) The notion behind collaboratives is that combining the knowledge and interests of school district and university personnel encourages use of up-to-date knowledge about effective teaching in the schools' training activities and promotes conduct of studies to generate new knowledge about teaching and teaching development. Often, the studies focus on the identification of requirements of effective instruction that apply specifically to teaching in the locales that the development schools serve. Thus, teacher development schools might include a principal who administers the basic education program and a director of teacher education who works with a collaborative to design and to conduct the schools' training and research efforts.

The services to be provided by teacher development schools have been discussed by the Holmes Group (see the Holmes Report, 1986) and demonstrated in a program underway in the Pittsburgh, Pennsylvania Public Schools (see Wallace, 1985). Frequently, expert, experienced teachers and novice teachers are put together as teaching teams. This may be a one-to-one team or a team that includes one experienced teacher and several novice teachers. The experienced teacher and novice teacher(s) plan and teach together the self-contained classes or the courses to which they are assigned. At times, the experienced teacher observes as a novice teacher conducts a lesson; other times the experienced teacher is observed by the novice(s). Analysis of the teacher's actions during the lesson and discussions of students' performance follow either type of observation. Throughout a school week, the experienced teacher leaves the classroom to conduct teacher development classes. Likewise, the novice teachers leave to participate in training sessions.

When they first enter teacher development schools, novice teachers serve as interns or instructors. They are not solely responsible for planning and conducting instruction. Only when the experienced teacher with whom they work and the persons who conduct their training seminars determine that a novice can effectively carry out full time teaching responsibilities is that teacher given complete responsibility for instruction of students and moved to a position in another school. At the new site, teachers in their initial years of teaching often continue to work with a mentor teacher who is linked with the teacher development school.

Teacher development schools can be established as part of the existing education program by individual school districts or by several districts that join together. However, provision of state, federal, and other additional funds to support some, if not all, of the schools' teacher development and research efforts is advised. Supplemental funds increase the likelihood that teacher development schools will be created. They promote teacher development programs that are of high quality. They increase the effectiveness of the experienced teachers who work in the school by releasing them from instruction of students for part of the time to focus their attention on the development of one or more novice teachers.

Inter-Institutional Collaboration

Throughout this paper, the importance of assuring that the training and support services provided to teachers during their initial years of teaching are based upon what is known about effective teaching has been argued. The desirability of bringing together the knowledge and

human expertise that reside within school districts, universities, and intermediate educational agencies has been noted. Two structures are proposed to achieve these ends: school district-university collaboratives and a state level Center for Quality Teaching.

Structure 3: School District-University Collaboratives

School district-university collaboratives are arrangements that bring representatives of one or more school districts, one or more university schools of education, and perhaps one or more intermediate educational agencies, such as education service centers, together to plan and to carry out various sorts of educational improvement efforts.

With regard to initial years of teaching programs, an important role for a collaborative is planning and operation of the training and research aspects of the programs. These functions might be performed through a teacher development school or as diverse training efforts. Regardless of the form of delivery, collaborative activities might include mentor teacher's training, conduct of a specific novice teacher's training sessions, monitoring and evaluation of novice teachers' effectiveness during their initial years of teaching, and redesign of preservice and inservice training to better fit the goals and expectations of a teacher development school or of a school district teacher education program.

Assigning such efforts to collaboratives capitalizes upon the practical knowledge and expertise of the school district members, the research and training knowledge of the university members, and the implementation and dissemination skills of the intermediate agency members.

Often, a collaborative is led by a steering committee composed of persons from the participating agencies, e.g., school principals, school superintendents, deans of education, members of the schools of education faculties, and representatives from the intermediate agencies. The steering committee would elect a collaborative director from among their membership or appoint someone to serve as a paid director.

The steering committee is responsible for identifying areas in which collaborative work is done. For example, as a starting point, a committee might call for development, testing, and evaluation of a mentor teacher program. A "work team," including school district, university, and intermediate agency staff, would be formed and charged with development of the selection procedures, training, and other aspects of a program. However, once the program was implemented, all steering committee members and other persons from their respective institutions would be called upon to assist with various activities.

The value of such collaboratives has been discussed by numerous experts in educational improvement (for example, see Clark, 1985, and Ward & Pascarelli, in press). A 1985 symposium in Illinois explored the requirements and potential contributions of such inter-institutional arrangements (see University of Illinois, 1985). A major point in these discussions is that collaboratives change the top-down view of educational improvement. Schools and school personnel no longer are seen as the only foci for change. With responsibility for improvement of teaching and education placed on all participants, collaboratives often expand the arena for change to include universities and other agencies as well.

When collaboratives begin to engage in program development and implementation, sharing of ideas among the participants serves as a stimulus for further interaction. However, collaboration is hard work. Collaboratives are difficult to get started and complicated to maintain. They require nurturing and special support.

Provision of competitive funds at the state level to support new programs or activities proposed by collaboratives can encourage their creation. Receipt of such funds serves as recognition and reward for those who are willing to perform the difficult tasks of thinking, planning, and doing together. The activities that result sustain the value of collaboration.

Designation of a state director of collaboratives is another step that can be taken to build inter-institutional collaboration. This individual can identify and bring together agencies that would benefit from a collaborative effort. Keeping informed about the work underway in collaboratives, bringing the programs and products of one collaborative to others, linking collaboratives that are working on similar improvement areas, and applying the outcomes and concerns of the collaboratives to state department planning and services are other roles a director might serve. Whatever mechanisms are used, financial and human support, guidance, and encouragement will be needed to get collaboratives started.

Structure 4: The Center for Quality Teaching

For persons who are interested in improvement of teachers' initial years of teaching, it is interesting to note that the empirical knowledge base regarding effective teaching and teacher education has expanded greatly during the past decade (see *Elementary School Journal*, 1983), but the technical and theoretical knowledge bases in the field remain largely untapped (Griffin, 1986). Gaining access to and applying the entire range of available knowledge to reform of the initial years of teaching warrants particular attention, even though teachers place high priority on help and solutions of a technical nature during their induction to teaching. Hence, statewide acquisition, compilation, and dissemination of knowledge about teaching and teacher education is needed. A Center for Quality Teaching is recommended as a vehicle for providing such state-wide leadership.

A Center for Quality Teaching could be designed to serve several functions. One might be direction of state sponsored research and development efforts related to improvement of teacher education. For example, the competitive funds to support collaborative activities might be managed by the Center. Grants also could be made to individuals to compile research on various aspects of teaching and teacher training or to conduct small-scale studies.

Another function might be operation of an information dissemination system. This system would obtain, synthesize, and disseminate new knowledge about teaching and teacher education to school districts throughout the state. It would strengthen acquisition and dissemination of technical and theoretical as well as empirical knowledge.

Conduct of statewide or regional seminars or colloquia is another role the Center might play. These gatherings could be designed to explore practical and creative next steps in the improvement of teaching and teacher education in a school district, a collaborative region, or the state as a whole. Output from the colloquia, in turn, could be made available to school districts, universities, superintendents, the state board of education, the state legislature, and other policy bodies to guide formation of new policies and practices related to teaching.

An obvious question is why recommend such a new structure when existing units of the state department of education or university schools of education might serve this purpose? The reason is clear. Improvement of teaching should capitalize upon and build from a base that crosses all institutions that are responsible for teachers and teacher education. Placement in a single existing unit probably would place more responsibility in one agency compared with another. The top-down perspectives, which local education agencies are apt to bring to working relationships with a state department of education or a university, would be apt to prevail. Parity among participants would be difficult to achieve. Hence, a new Center is proposed.

Establish Standards

Unless initial years of teaching progams meet the requirements that have been discussed thus far, they may have little impact upon the growth and development of new teachers or on their decisions to remain in the teaching profession. To be effective, these programs must include specific types of services and offer well thought out teacher development experiences. Hence, establishing standards that initial years of teaching programs must meet is an important part of any attempt to improve induction of novice teachers into teaching. Standards for advancement of teachers from initial years of teaching programs to regular teaching positions is another.

Structure 5: Initial Years of Teaching Program Standards

Program standards fit naturally with the proposed provision of supplementary funds to support mentor teacher, teacher development school, and other initial years of teaching teacher development, research, and evaluation activities. Application for such funds serves as a tool for specifying and applying the standards to be met.

For example, applications to provide mentor teachers might be required to demonstrate that mentor teachers will (a) complete a planned curriculum based on what is known about effective use of mentor teachers, (b) be selected in a fair and objective way, and (c) be given time to work with novice teachers. Teacher development school applications might be required to show that novice teachers will engage in a planned, sequential growth process. They also might be asked to show how the program at these schools relates with other ongoing parts of the school district's educational system. Specification of the roles and responsibilities to be carried out by specific persons from the collaborating institutions and evidence that the assignments given to new teachers have been well thought out might be other requirements.

Of course, to enact such demands, an agency such as a state department of education must have supplementary monies that can be made available to support new program activities. In addition, the agency should provide funds for planning well thought out efforts and setting up a short-term, temporary advisory group composed of teachers, university deans and faculty, school administrators, and others to delineate the standards that will apply.

Structure 6: Teacher Advancement Standards

By now, this paper has reiterated several times that novice teachers (a) are not prepared to be regular, full time teachers when they enter the teaching profession and (b) should demonstrate they are ready for such responsibility before they leave initial years of teaching programs. This being the case, at least at the local level, and perhaps at the state level as well, teacher advancement standards should be part of programs for novice teachers.

Various approaches have been taken to the generation and application of teacher advancement standards. Some 15 states have developed and implemented new state level credentialing standards and processes during the last five years (Arizona, Florida, Georgia, Oklahoma, and Tennessee, to name a few). School districts also have set criteria to assure that new teachers who teach in their schools are qualified to do so. (Charlotte-Mecklenberg, North Carolina; Toledo, Ohio; and San Diego, California provide examples.)

In all instances, review and debate have taken place about what comprises effective teaching at beginning and other levels of experience and responsibility. Automatic certification based on completion of a specific set of college level courses or semester hours of work in a particular subject matter or professional area has been eliminated. Procedures for assessment have been designed, and support services for novice teachers have been put in operation with the intent to

increase the proportion of individuals whose work in the teaching profession meets the standards of effectiveness that have been set.

While much can be learned from these efforts, they also can be improved upon. For example, Griffin (1986) noted that in setting standards little attention has been given to the craft knowledge developed by expert, experienced teachers or to the possible implications of the knowledge about teaching and teacher education currently being investigated and tested. Hoffman et al. (1986) found that application of the new standards prevented few novice teachers from advancing to regular teaching positions at the end of their first year of teaching. This may have been the result of the training and support given the teachers, or it may indicate that the new standards were applied in an ineffective manner.

To alleviate problems such as these, once school district-university collaboratives are established, assignment to them of the responsibility for setting standards for advancement of novice teachers in their respective regions is recommended. This approach has greater promise of satisfying the need for attention to a broad range of knowledge about effective teaching than district by district efforts. It also can encourage attention to what it takes to be an effective teacher in the school districts that are part of the collaborative. Teacher advancement can be based on practical as well as empirical standards.

To arrive at standards for novice teacher advancement to a regular teaching position, a collaborative might elect to take on the task themselves. Or, they might appoint a temporary advisory group to propose standards. Such a group would include persons representing both novice and experienced teachers, school district administrators, university school of education deans and faculty members, and community members.

This group might carry out several tasks. One would be to explore the requirements for effective teaching in the region served by the collaborative, the knowledge base regarding effective teaching, and the school district mechanisms that are available to support the growth and development of teachers who are in regular teaching positions. Building from this information, a second task would be to draft a tentative set of standards that responded to this information. The standards then would be submitted for review by the collaborative's steering committee, organized teachers' groups in the region, boards of education, and school district administrators. A final task would be preparation and submission of a final set of standards to the collaborative steering committee and to the school districts in the region.

Application of the standards, then, might fall at the collaborative or the individual district level. Regardless, action should include review of the training and other services provided to novice teachers to determine if the teachers are building the desired skills and knowledge. Acquisition of information that verifies when a novice teacher has met the standards also will be necessary. Relying upon the collaboratives to perform this work is advised.

Conclusion

Six structures have been proposed that support development and implementation of programs, materials, procedures, and processes to increase teachers' effectiveness during their initial years of teaching. These same structures can be used to improve other stages of teaching and, thus, to provide a framework for implementing reform throughout the teaching profession.

Several of the structures incorporate both state and local level entities and activities. This is intentional. Promotion of cross-state sharing of experiences, information, and outcomes is one aim. Responsiveness to the requirements of the specific contexts in which novice and experienced teachers teach is another.

However, having recommended such multi-level structures, two concluding comments are pertinent. First, although supplemental funds have been recommended to support many of the functions and activities assigned to the proposed structures, school districts *do not* need to wait for state level impetus or support to put the structures in place. Efforts underway in places such as Pittsburgh, Pennsylvania; Toledo, Ohio; and Charlotte-Mecklenberg, North Carolina, to name a few sites, demonstrate that local districts can act on their own. This is not to say that the impact and longevity of the proposed structures will not be greater with state monetary and administrative support and involvement; they will. It does suggest that school districts should not use the state as an excuse for ignoring the problems and needs of novice teachers or the calls for reform in the teaching profession.

Second, all the work done by mentor teachers, teacher development schools, and school district-university collaboratives will be diluted if the schools in which experienced teachers teach do not possess *all* the features of excellent schools. The notion that a teacher, is a teacher, is a teacher no longer can prevail. Technical requirements cannot take precedence over teacher and student growth and development. Standards cannot be ignored when it comes time to develop teacher training efforts or to staff schools. Teacher expertise cannot be hidden in a morass of paper work and rules.

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WORKPLACE CONDITIONS OF TEACHER QUALITY AND COMMITMENT: IMPLICATIONS FOR THE DESIGN OF TEACHER INDUCTION PROGRAMS

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Of the many resources required by schools, the most vital are the contributions——of effort, commitment, and involvement——from teachers. The quality of their contributions is not only related to student learning; it is also the ultimate means through which many other resources for school success are acquired. For example, academically successful schools, through greater teacher effort and involvement, are able to accrue greater parental support for, and assistance in, their children's learning than unsuccessful schools (Clark, Lotto, & Astuto 1984; Epstein in press; Schneider 1985). Central to a school's academic success, then, is its ability to motivate teachers to make purposeful contributions to it rather than to some competing endeavor.

Recently, however, researchers have disclosed several trends that call the quality of teachers' contributions into question. Among the most alarming is that early "defectors" from teaching are the most academically talented individuals (Lyson & Falk, 1984; Mark & Anderson, 1985; Schlechty & Vance 1983), who, at least as revealed by tests of verbal ability, are the very teachers most likely to succeed in helping students learn (Ekstrom, 1975; Gibson & Dembo, 1984; Levin, 1970). A number of related findings underscore this problem poignantly. For one thing, attrition from teaching in the earliest years of one's career is staggeringly high: Over 30% of new teachers do not make it to their fifth year; another 20-30% of the same cohort have defected (Charters, 1970; Mark & Anderson, 1985; Schlechty & Vance, 1983). To make matters worse, for the large majority of those who remain, their teaching effectiveness wanes considerably after five years, and more substantial declines are evident after ten (Katzman, 1971; McLaughlin & Marsh, 1978; Murnane, 1975). It is between precisely these points, moreover, that teacher burnout and its accompanying dysfunctional classroom behavior become a fundamental school problem (Farber, 1984; Rosenholtz & McAninch, 1986).

In sum, teachers with the potential for making the greatest academic contributions to schools are also most likely to defect earliest in their careers. For most who survive their first few years of teaching, their performance and school commitment suffer considerably thereafter.

Fortunately, none of these problems is intractable. A growing body of research on the organizational conditions of teaching suggests that this dismal and discouraging picture may, to no small extent, even be reversible. In this paper I develop a theoretical context with which to understand teaching quality and commitment to the workplace. I then review research findings on the school conditions most likely to induce teachers to remain in the work force and to contribute productively. In the final section, I draw some policy implications for the benefits that may accrue to those who are involved in teacher induction programs.

The Definition of Workplace Commitment

The basic conditions that promote high performance motivation and commitment to work have been described by some organizational social psychologists as *internal motivation.* Where people are highly motivated, their feelings are closely tied to how well they perform on the job; good performance is self-rewarding and provides the incentive for continuing to perform well. Alternatively, poor performance is an occasion for distress that causes internally motivated people to search for ways to avoid such feelings in the future and to regain those pleasurable feelings

that accompany good performance (Hackman & Oldham, 1980). But, when people experience low internal motivation, they come to feel dissatisfied and alienated, and they subsequently engage in a variety of work behaviors that reinforce their task failure, including absenteeism from work, low effort expenditure, and outright defection.

If high internal motivation is a condition necessary for workplace commitment, it follows that teachers' commitment can alternatively be viewed as *the extent of their work investment, performance quality, satisfaction, attendance, and desire to remain in the profession*, a definition I will pursue in the present paper. There are several sound reasons for the clustering of these variables (Rosenholtz forthcoming). For one thing, dissatisfaction with the conditions of work may manifest itself most dramatically in a decision to defect from teaching. The link between dissatisfaction and actual defection, however, depends on the alternatives individuals perceive available. A lack of alternative types of employment or declining enrollment which limits opportunities for teachers to transfer to more favorably perceived schools, for example, may cause dissatisfied teachers to stay where they are, to exert little productive effort, and to "settle" for less. As the ultimate manifestation of withheld service, teachers often resort to chronic absenteeism, a problem quite prevalent in many unsuccessful schools.

Indeed, a growing body of evidence reveals that the extent of workplace dissatisfaction and burnout can be used successfully to account for absenteeism and attrition, on the one hand, and involvement with, and success in teaching, on the other. *The Metropolitan Life Survey of Former Teachers in America* (MLS, 1986), for instance, in interviewing some 500 former teachers across the country, found that two frequently-cited reasons for teacher attrition were workplace dissatisfaction and stress. Coupled with this latter finding is a comprehensive survey of, and interviews with, teachers from 78 elementary schools conducted by Rosenholtz (forthcoming), in which workplace dissatisfaction and burnout were major sources of teacher absenteeism, their low work investment, and their ineffectiveness in helping students gain academically.

Organizational Conditions of Workplace Commitment

Work motivation and commitment has less to do with personal qualities people bring to the workplace than with the design and management of tasks within it. The contributions of Hackman & Oldham (1980), Kanter (1977), and Gecas and Schwalbe (1983) inform my analysis of the way people's attitudes and behavior are shaped by differing organizational settings.

Knowledge of Positive Results

First, for work to be motivating, people must have knowledge of the success of their efforts (Hackman & Oldham 1980; Kanter 1977). Without knowledge about how successfully one performs, there is little reason for self-congratulatory sentiments. Knowledge of performance is directly related to the amount of positive feedback one receives from doing work. Feedback can be obtained directly from the work itself, as when a physician prescribes a medication and discovers that it does, in fact, work; or it can be obtained from external recognition and approval that may be offered by others valued within the organizational setting, as when a supervisor commends a subordinate for a job well done. Knowledge of one's positive performance can be defined as *psychic rewards*, where people gain estimates of their particular worth in a performance context.

Most teachers derive their strongest rewards from positive and academically successful relations with individual students and from the external recognition they receive from colleagues, parents, and principal (Lortie 1975; McLaughlin et al., 1985; Rosenholtz forthcoming). It is not unexpected, therefore, that the absence of psychic rewards figures largely into teachers' dissatisfaction, absenteeism, and desire to leave the work force (Bredeson et al., 1983; Kasten 1984; MLS 1986).

Increased Task Autonomy and Discretion

To enhance workplace commitment, people must also experience personal responsibility for the outcomes of work, believing that their performance is attributable directly to their own efforts. If the outcomes of work can be explained more by outside factors (such as having a "good" or "bad" class) than by people's own contributions, again there is little reason for performance-based self-esteem, even when they achieve particularly positive results. This organizational dimension involves the extent to which work provides substantial freedom, independence, and individual discretion in carrying out tasks (Hackman & Oldham, 1980; Kanter, 1977). Jobs that give people more autonomy and discretion require that they exercise judgment and choice; in doing so, they become aware of themselves as causal agents in their own performance——the feeling of making things happen with intentional striving. Losing the capacity to control the terms of work, determining what work and how the work is to be done, or what its aim is to be, widens the gap between the knowledge of one's unique contributions and any performance-based self-esteem derived from it. The results of work no longer reflect individual efforts, and people become estranged and alienated, unwilling to accept personal responsibility for, or ownership of, their performance outcomes (Gecas & Schwalbe, 1983; Kanter 1977).

For teachers as well, there is substantial evidence that professional independence and discretion bolster motivation, responsibility, and commitment while a lack of workplace autonomy is frequently cited as a reason for dissatisfaction, absenteeism, and defection (Chapman & Hutcheson, 1982; Miskel, Fevurly & Stewart, 1979; Rosenholtz, forthcoming). For instance, deCharms & Muir (1978), in one of the most comprehensive studies of motivational change, attempted to reverse teachers' conspicuous disinterest in classroom learning affairs in one inner-city school. To accomplish this, the researchers initiated an extensive program in which teachers became reflective about their situation and resources. Aided by several important administrative changes, teachers came to perceive they had options, choices, and opportunities. And, as teachers developed the sense that they could indeed control their own fate, their work investment, satisfaction, and academic success with students increased dramatically.

It is well worth noting at this point that the problem of low professional empowerment is not simply one of lack of commitment to teaching. There is a more fundamental way in which discretion and control over classroom decisions directly influence teachers' success with students and their ability to accrue psychic rewards. Stated simply, discretion over critical matters related to classroom instruction allows teachers to accommodate the varied learning needs of individual students within their classes. To impair the adaptation of curricular content or instructional strategies to improve the fit between what teachers do, on the one hand, and students' different learning needs, on the other, is to unwittingly program both students and teachers for greater academic frustration and failure (Darling-Hammond & Wise, 1985; Rosenholtz, in press a; Shulman, 1983). As a result, teachers' lack of success with students earns them fewer psychic dividends and less occasion for self-congratulation. This explains more clearly why the lack of teacher discretion over classroom learning affairs is frequently implicated in the failure of schools to succeed academically with students (see Rosenholtz, 1985 for a review).

The problem of low workplace commitment that the loss of professional autonomy and discretion engenders is especially acute for academically talented teachers (Darling-Hammond, 1984; Chapman, 1983). For their part, bureaucratically mandated teaching prescriptions run counter to the professional practices that they *know* are successful, and their frustrations outweigh their rewards when they are prevented from exercising and applying the varied pedagogical options at their command. In the end, the academic success of the school suffers the most severe setbacks when talented teachers lose their commitment.

Experienced Meaningfulness of the Work

Finally, if job performance and commitment is to be enhanced, people must experience work as meaningful--something that is important to their personal values and beliefs. If work is perceived as unimportant, no matter how much feedback about good job performance people receive and no matter how much task autonomy they possess, there is little basis for self-fulfillment.

Professional growth. Work can elicit feelings of personal meaningfulness for those who perform it in a variety of ways. One way is through opportunities for professional growth and development--skills that are utilized in a variety of different and increasingly challenging activities. Once mastered, jobs become routine, tedious, and monotonous unless there is further challenge that stretches people's talents and skills. Work opportunities that allow people to grow and develop, to perfect current skills and learn new ones, give them a sense of challenge, progress, and personal accomplishment (Hackman & Oldham, 1980).

For their part, teachers often complain of monotony, professional stagnation, and a lack of direction where they have continued to use the same instructional techniques and practices year after year, quite often to the point of becoming bored, unenthusiastic, and unable to motivate students (Blase, 1986; Bredeson et al., 1983; Connell, 1985). This may in part explain more experienced teachers' loss of classroom effectiveness and burnout noted earlier. It comes as no surprise, therefore, that the opportunity to confront new challenges and to test and expand their professional repertoires is the primary reason teachers involve themselves in innovative instructional programs (Huberman & Miles, 1984; Mann, 1985). People confront new task challenges not just because they are interesting and exciting but because their goal is to learn, to become better skilled and knowledgeable. We can then understand more fully why the absence of opportunities to broaden their instructional horizons are frequently cited by teachers as reason for their absenteeism and attrition from work (Bredeson et al., 1983; Kasten, 1984; Rosenholtz, forthcoming).

Teacher efficacy. But for new tasks to have highly motivating potential, people must have sufficient confidence that they possess the ability and skills that can stretch with increased work challenge. That is, people move initially toward confronting new challenges only where there is a reasonable chance of success--some assurance that their new efforts will produce the outcomes that they seek (Locke, 1975). In the case of teachers, commitment to meet classroom challenges pivots fundamentally upon their efficacy or confidence in their professional practices and their confidence that students can learn. That is, when teachers feel efficacious about their professional practices, they expend greater effort with students, which in turn bolsters their beliefs that students are, in fact, capable learners. The opposite side of the same coin is that challenges perceived as too great or costly to the performance-based self-esteem of teachers may cause them to anticipate a sense of frustration and failure which they are not likely to risk; in the end, their beliefs that students cannot learn are confirmed (e.g., Ashton & Webb, 1986; Blase, 1986; Rosenholtz, forthcoming).

Much of teachers' efficacy and willingness to confront new challenges hinges on the meanings they give to their own teaching failure or success. Those who are confident about their instructional practices and students' capabilities, on the one hand, are likely to attribute successful or unsuccessful performance to something *they* have done, rather than to luck, chance, or an easy undertaking. They confront new challenges, therefore, with a healthy dose of optimism and effort. Low efficacy teachers, on the other hand, are more likely to attribute teaching success and failure to outside causes, such as having a "good" class in the former case and a lack of administrative or parental support in the latter. Believing that outside factors make teaching success beyond their professional grasp, unefficacious teachers shy away from new job challenges that seem likely to produce the same low performance-based self-esteem (Rosenholtz forthcoming).

Teachers' impact on students. The extent to which people believe that their efforts will have an impact on the lives of others also enhances work meaningfulness. If people believe that their work contributes to solving important, critical problems, it takes on greater significance (Hackman & Oldham, 1980; Kanter, 1977).

People who choose to teach often explain their decisions to enter the profession by citing the importance of working with children and helping them learn (Lortie, 1975; Wood, 1978; Robertson, Keith & Page, 1983). Likewise, teachers already in the profession cite the human contributions that can be made as the most motivating factor related to occupational choice (Bishop, 1977; Bredeson et al., 1983; MLS, 1986). For precisely this reason, the relationship between teachers' performance efficacy and their psychic rewards becomes especially crucial. If personal definitions of career success——those of helping students learn——are perceived by teachers as unfeasible to attain, work loses its meaningfulness, and dissatisfaction and defection increase dramatically (e.g., MLS, 1986).

Beginning teachers are especially vulnerable to feelings of low performance efficacy (Chapman, 1983) and its pernicious effects. As we shall discover below, early frustrations encountered due to inadequate preservice preparation and a lack of administrative and collegial support rapidly discourage novices from pursuing a career in teaching, and low efficacy beginners leave the profession in disproportionately high numbers.

Aside from these reasons, the frustrations that beginners encounter, more often than not, are well-founded. Having the least seniority in the allocation of good placements, new recruits often find themselves initially assigned to unsuccessful, low SES schools, where high attrition produces the greatest availability of teaching positions precisely because of few psychic rewards and low performance efficacy (see Rosenholtz, 1985 for a review). More, and quite apart from the school's SES, it is frequently the case that "good" classes are taught by those with higher seniority while novices are given the most difficult and challenging classes to teach (Denscombe, 1985; Griffin et al., 1983; Sizemore, 1986). With this background in mind, then, we develop a high resolution snapshot of early career attrition: The failure of new teaching recruits to feel confident about their classroom practices, to believe that student learning outcomes are possible to achieve, and to sense that they are making significant difference in the lives of their students combine to produce greater teaching frustrations than psychic rewards.

It is important to note, however, that in addition to ill-conceived classroom and school assignment practices, teachers' efficacy about instructional practices and student capabilities are determined in large measure by other workplace circumstances. For this reason, I examine each condition in greater detail below.

The Negative Consequences of Low Commitment

The absence of workplace conditions that provide opportunities for professional fulfillment has profound and negative consequences for work commitment (Gecas & Schwalbe, 1983). People recognize the real constraints and deprivations upon their performance, and they have a clear sense of their low performance-based self-esteem. But, because people invariably have the need to make self-enhancing judgments about themselves, the meaning and definition of success in these settings are often recast among organizational members in terms of behaviors and values that still allow them opportunity to derive a sense of self-esteem, status, and control.

Instead of rewards earned through productive job involvement, people redefine their work as simply to "make out" (Gecas & Schwalbe, 1983). "Making out" behaviors——providing temporary relief from boredom, passing time, finding ways to leave the job, focusing more on social than on work relationships with co-workers, and so forth——and the sense of esteem that is

derived from them are, of course, antithetical to productive work. Stated differently, the work context no longer becomes a source from which efficacy is derived; work becomes devalued and at, the same time, oriented toward satisfactions other than those that come from successful job performance.

Teachers who are repeatedly thwarted in their quest for psychic rewards, professional empowerment, opportunities for growth and development, and a sense of performance efficacy also dysfunctionally redefine their work. We have already reviewed extensive findings on their absenteeism and workplace defection resulting from the absence of these workplace conditions. But, there are other strategies that dissatisfied teachers employ--albeit unconsciously--simply to "make out." For one, they converse more with their colleagues about non-teaching related matters and poor working conditions than on teaching problems, solutions, and new ideas (Ashton & Webb, 1986; Little, 1982; Glidewell et al., 1983). And, this negative type of teacher talk is something of a paradox. Where colleagues repeatedly swap experiences about difficult work conditions--such as problem parents and students and a lack of administrative support for dealing with them--they reinforce their beliefs that a lack of teaching success is attributable primarily to outside sources over which they have little control. In other words, they unwittingly convey to each other that, confronted by such overwhelming odds, no one can reasonably expect to succeed. The possibility of mustering necessary energy and effort to overcome outside obstacles is summarily dismissed as unworthy and hopeless (Rosenholtz, forthcoming).

Teachers often use a second tactic to maintain their self-esteem when their instructional success is not forthcoming: They substitute definitions alternative to student learning as their measure of professional fulfillment. Some teachers choose to focus more on friendships than on professional relations with colleagues (Bishop, 1977; Glidewell et al., 1983); some direct their attention toward union activism instead of teaching (Bacharach, Mitchell & Malanowski, 1985; Rosenholtz, forthcoming); some concentrate entirely on developing good interpersonal relations with students, befriending rather than instructing them (Demscombe, 1985; Rosenholtz, forthcoming); and some redefine their goals in terms of simply maintaining student control rather than making academic progress (Ashton & Webb, 1986; Denscombe, 1985; Rosenholtz, forthcoming). And quite ironically, while teachers misguidedly pursue such actions to salvage some sense of self-esteem, the results are inimical to the interests of student learning.

The essential point to emphasize in all of this is that the organizational conditions of schools are responsible for creating some of the major problems associated with teacher quality and commitment, and, just as powerfully, the organizational conditions of schools mold the strategies that teachers find most acceptable and appropriate to use. In the following two sections we see how workplace conditions shape two essential components of teachers' productive involvement in work--their learning opportunities and their sense of teaching efficacy--and how, in their absence, some of the dysfunctional teacher actions outlined above originate.

Workplace Conditions of Teachers' Learning Opportunities

If teachers' opportunities to learn and to grow are a critical dimension of their commitment, it becomes important to delineate the school conditions that provide such opportunities. In this section of the paper, I identify several organizational features of schools that encourage professional growth and that also make substantial contributions to teachers' performance efficacy, their psychic rewards, and, finally, students' learning outcomes (Rosenholtz, forthcoming).

Opportunities to acquire teaching strategies and skills related to teaching, and the types of skills acquired, depend in large part on prevailing values and patterns of interaction between teachers and principals. Principals, moreover, in many ways, shape the organizational conditions

under which teachers work and the definitions of teaching they come to acquire. As with teachers in unsuccessful schools, where principals suffer uncertainty about the capacity of teachers to bring about improved academic performance, they tend not to act in ways that enhance teachers' or students' learning opportunities. Principals of the most academically successful schools, by contrast, convey through the specific actions detailed below, a conviction that teacher and student learning outcomes are linked closely to teacher effort.

Goal Clarity

One activity that distinguishes more from less academically successful schools is the setting of specific goals for student learning by principals and faculty. Goal clarity in these settings is often brought about by principal action that ensures frequent opportunities for contact among colleagues about the school's instructional priorities and goals. At some schools, time is set aside by principals for meetings among faculty to discuss instructional goals, possibilities, and impediments. At other schools, substantive interaction opportunities are built into inservice programs or by establishing subgroups of faculty who are charged with solving particular school problems (see Rosenholtz, 1985, forthcoming).

Goal-setting activities are critical to teachers' learning opportunities for three reasons. First, they communicate directly that teachers are, in fact, capable of improvement as manifest by student learning. Second, school goals provide a basis for rational decision-making and action--a way for teachers to decide how to organize, to execute, and to evaluate their instructional decision. Without common goals, teachers have little basis for deciding what to emphasize in their teaching or how to gauge their teaching success. Improvements in their performance then become unlikely or random without a clearly perceived need. But in stressing, for example, the importance of students' mastery of basic skills as a school-wide goal, teachers have clearer direction for choosing curricular content and method and for evaluating and modifying their choices to improve. Third, without common goals, there can be little common effort expenditure by teaching colleagues and, consequently, precious little basis for professional dialogue. It happens, therefore, that without school goals, teachers point efforts toward improvement--if they make them--in entirely different directions (Rosenholtz, forthcoming).

Teacher Evaluation

Teacher growth and development depends, to no small extent, on their recognized need for new skills. The absence of clear guidelines about what teachers are to emphasize, however, leaves many uncertain about precisely how well they are doing (e.g., Ashton, Webb, 1986; Rosenholtz, 1985, forthcoming) and offers few means by which to either identify improvement needs or to redirect energies toward meeting those needs. Ambiguity about performance springs at least as much from principals' lack of clarity about how teachers' performance is to be monitored and evaluated. Most principals, unsure that their actions will produce any desirable effects, not surprisingly muster little effort to resolve this ambiguity for teachers either in the frequency, clarity, or usefulness of their evaluation efforts.

Affirming this point is Dreeben's (1970) study, in which fewer than 50% of the randomly sampled principals reported sufficient time for the accurate assessment of teachers. In fact, 33% of the tenured teachers and 19% of the probationary teachers reported *no* classroom observation at all. An even gloomier picture of teacher evaluation is painted by Natriello & Dornbusch (1980). Teachers reported receiving formal evaluations from their supervisors--albeit mostly unclear and unhelpful--only once in every three years.

In stark contrast to schools where uncertainty on the part of teachers arises from infrequent, unclear supervision (if, indeed, any supervision at all), principals in academically successful

schools, guided both by the assurance that teachers can learn and by explicit learning goals, regularly monitor classroom affairs and students' learning within them. Further, standards for evaluation are both shared and valued by faculty because they have taken part in developing them (see Rosenholtz, 1985, forthcoming).

The proposition that clear, frequent, and useful evaluation results first, in the development of better teaching strategies, and second, in student learning, is supported by two investigations. In a two year longitudinal study of the implementation of the Distar reading program in seven low SES elementary schools, Gersten, Carnine, Zoref & Cronin (1986) found that use of explicit evaluative criteria combined with intensive monitoring, feedback, and assistance to needy teachers in their day-to-day classroom problems resulted in greater teacher learning and, ultimately, in substantially greater student mastery of reading skills. Similarly, Wise et al (1985), in detailed case studies, discovered that the most effective district evaluation practices placed primacy on improving both individual and collective teaching practices within the school. Teachers and administrators collaborated about evaluation goals, processes, and outcomes. Consequently, each system sharpened teachers' awareness of the process of instruction in their own classroom practices, accelerated remedial help by principals and other staff, and permitted situation-specific rather than standardized assistance to be rendered. As a result, one district reported that over a four year period, evaluation practices aimed at staff development brought about a 20-percentile gain in student achievement test results.

Managing Student Behavior

A major hindrance to teacher learning is the disruption in some schools caused by disorderly students. Student misbehavior places substantially greater burden on teachers' efforts to improve, simply because it forces teachers to spend their time mediating classroom disputes rather than developing their instructional skills (e.g., Blase, 1986). In fact, in many ineffective schools, student misconduct becomes so pronounced that the goal of classroom order often displaces student learning as the definition of teaching effectiveness. Success in controlling students——sometimes using any means——becomes synonymous with teachers' sense of efficacy, and classroom activities become oriented toward goals of control rather than goals of student learning (Blase, 1986; McPherson, 1972; Rosenholtz, 1985). Goal displacement then, carries profound and pernicious consequences for teachers' learning opportunities.

Not unexpectedly, student disruption to the flow of teaching occurs less frequently in academically successful schools than in others. Here principals or their administrative assistants, guided by both the school's instructional goals and the expectation that teachers can be helped to improve, work with teachers to set and consistently to enforce clear standards for student conduct throughout the school. With synchronized school efforts to focus students' attention on classwork rather than elsewhere, teachers' and students' learning increases (see Rosenholtz, 1985, for a review). One need only consult the research on the positive relationship between students' on-task behavior and their learning gains to see how powerful this effect can be.

Managing student behavior at the school level is most crucial for the professional growth of beginning teachers. "Reality shock" has been used to describe the experiences of new entrants as idealism and romanticism give way——usually within the first year——to an understanding that, before one can teach students anything, it is necessary for them to be attentive (McArthur, 1978). Learning to manage students' sometimes unruly behavior is, thus, the first important and difficult undertaking of beginning teachers and a skill that is widely used as an early measure of the newcomer's teaching potential (Denscombe, 1985; Warren, 1975). For precisely this reason, when novices enjoy support and instruction by principals and colleagues in maintaining appropriate student conduct, they accrue greater opportunities for learning (Rosenholtz, 1985; in press b).

Teacher Isolation and Collaboration

Most schools are characterized by isolated working conditions where teachers seldom see or hear each other teach. Colleagues rarely communicate task-related matters, especially by requesting or offering professional advice and assistance to each other in efforts to improve instructionally (see Rosenholtz, 1985 for a review).

Professional isolation occurs, at least in part, because as teachers act to protect their self-esteem and cast themselves in the best possible light, they shy away from ambiguous situations where conclusions about a lack of professional adequacy may either be publicly or privately drawn. In particular, assistance clearly needed by another heightens teachers' attention to whatever abilities or skills might be salient in the situation. And, if questions should arise about how capably they can render such assistance, if they might be found wanting or deficient, rather than sustain possibly negative evaluations, they will frequently and unconsciously forego helpful efforts on behalf of a colleague to avert such self-disclosure. The other side of the same coin is that help-seeking is avoided where it is viewed as potentially embarrassing or stigmatizing and where it, again, threatens teachers' sense of professional adequacy.

Under these circumstances, then, teachers establish insulating boundaries around their working lives. Under the circumstances, teachers must develop idiosyncratic goals, methods of attainment, and gauges of their teaching success. And, under these circumstances, self-fulfilling prophecies arise: Where teachers fail to assist each other in solving common instructional problems, they convince themselves that they are, in fact, alone, that few others suffer similar teaching dilemmas and are in need of collegial assistance, and that many classroom problems simply have no apparent solutions (Rosenholtz, forthcoming).

Professional isolation carries profound implications for teacher learning, particularly for beginners (Dreeben, 1970; Lortie, 1975). Their capacity for growth is limited almost entirely to trial-and-error learning. They must rely primarily on their own ability to diagnose problems, to develop solutions, and to choose the best alternative. With little access to role models among their peers, they rely on memories of good teachers they recall from their own student experiences instead of gaining substantive knowledge from their more expert or experienced colleagues. That is, there is little exchange of any pre-existing body of practical knowledge——an already developed discourse——that could help teaching novices interpret and improve recurrent classroom problems.

However, to the extent that teachers believe that anyone, even the most capable colleague, might need help in a similar situation, it becomes unnecessary for them to draw causal inferences about their own teaching adequacy. That is, if teaching is collectively viewed as an inherently difficult undertaking, it is both necessary and legitimate to seek and to offer professional assistance. And, this is exactly what occurs in instructionally successful schools: Here, because of strong administrative or faculty leadership, teaching is explicitly defined as a collective rather than an individual enterprise; requests and offers of assistance among colleagues are frequent, and reasoned intentions, informed choices, and collective actions set the conditions under which teachers improve instructionally.

With collaborative endeavors, attending to the material requirements and organization of new instructional techniques or programs need not be duplicative; experiments that falter for lack of proper planning or foresight need not be doomed to repeated failure; successes that are discovered can be replicated, adapted, and celebrated by others without exhaustive and frustrating reinvention. In terms of effort and time, frustration and pleasure, learning to teach (and to teach better) is far easier where colleagues collaborate (Rosenholtz, forthcoming).

Two studies provide a more detailed examination of the positive relationship between collaboration, teacher learning, and instructional improvement. Ashton and Webb (1986) compared an isolated urban junior high school with a collaborative urban middle school by both surveying teachers and observing them on behaviors defined through research as effective teaching. Compared to isolated teachers, those in collaborative settings were more likely to teach effectively which resulted, in turn, in greater student mastery of basic skills. Further, Griffin et al. (1983), in their longitudinal investigation of teachers' preservice training, observed both student and cooperating teachers on similarly identified effective teaching behaviors. They found that the extent of collaboration between cooperating and student teachers led, over time, to incremental changes in effective teaching behaviors on the part of both interactants.

As implied above, teacher leadership becomes pivotal in fostering collaboration among colleagues. Rosenholtz (forthcoming) interviewed elementary teachers from collaborative schools, characterized by high commitment to student learning outcomes, and teachers from isolated schools where values and goals for teaching were highly idiosyncratic. When asked to describe the nature of teacher leadership in their schools, teachers from collaborative settings described their leaders as those who initiated new programs, tried new ideas, motivated others to experiment, and brainstormed solutions to teaching problems with those experiencing difficulty. It is well worth emphasizing here that leaders' task-related interactions with colleagues, when integrated into regular work-day activities, heighten teachers' consciousness of learning as a continuous process (Rosenholtz, forthcoming). Teacher leaders in isolated schools——if they indeed existed——earned their reputation by engaging in non-instructional activities, either by union-related leadership or by their empathic responses to colleagues' classroom or personal problems.

Taken together, these data illustrate with unmistakable clarity how teachers' perceptions of their work are shaped by the organizational circumstances in which they are embedded. Collective commitment to student learning in collaborative settings circumscribed the definition of leadership entirely to those colleagues who moved others toward fulfilling their instructional purposes. But, lacking shared visions about school direction and purpose, and psychically and physically distanced from others, teachers in isolated settings defined collegial leaders, not by their extent of involvement in goal-related activities but, instead, by the only formal and visible avenues available within schools to exercise such leadership, i.e., union representation.

For two important reasons, collaboration among colleagues is particularly critical for beginning teachers. First, beginners who are offered help, and who see requests and offers of assistance regularly exchanged between more senior colleagues, are socialized to accept school norms about the way in which one learns to teach. That is, norms of collaboration establish themselves in situations where newcomers observe colleagues engaged in some mutually accepted definition of the way teaching is done. Under these recurrent conditions of the workplace, novices come to perceive that advice is legitimately required to achieve instructional goals, that mutual assistance is often needed to attain them, and that they should avail themselves of collegial resources whenever possible. But, where newcomers observe few instances of faculty collaboration, they soon learn that teaching is more an individual than a collective enterprise. And, because both they and their colleagues interpret requests for advice and assistance more as an open admission of inadequacy than as eagerness to learn, in times of trouble novices seldom ask (Rosenholtz, in press b).

Second, and of equal importance, if beginners in isolated settings hear continuous complaining from colleagues about problem students, they quickly acquire the same custodial attitude toward them where order is stressed over learning and where students are treated impersonally, punitively, and distrustfully. New teachers in collaborative settings, by contrast, sustain their initially humanistic orientations about the importance of both caring and tending to the individual needs of students (Ashton and Webb, 1986; Bishop, 1977; Denscombe, 1985). In short, the

emphasis in collaborative settings on professional development——including essential classroom management strategies——undergirds beginners with sufficient support and knowledge to avoid custodial orientations and their unintended and deleterious consequences on students' academic learning.

Involvement in Decision-Making

Norms of collaboration do not just happen. They are not the result of serendipitous combinations of people. Rather, they appear to be the product of social engineering by principals who, guided by school goals and the belief that teachers can become more successful, both encourage collegial leadership in their schools *and* provide opportunities for collective teacher involvement in decision-making about the technical matters of instruction. The contribution of collective decision-making to teachers' learning opportunities lies in the deliberative evaluation, discussion, suggestion, and modification of instruction required to enhance the quality of classroom learning. These activities themselves increase teachers' clarity about instructional purpose and lead ultimately to greater learning, as decisions become conscious and well-reasoned choices rather than arbitrary or automatic reactions. For beginning teachers, specifically, opportunities to participate in decision-making with colleagues broadens their knowledge of instructional options, strategies, and curricular approaches (Rosenholtz, 1986, in press b).

Nowhere are the instructional benefits that accrue from technical decision-making better illustrated than in investigations by Cruickshank and his colleagues (1985). Here, inservice teachers instructed small groups of colleagues in a 15-minute pre-designed lesson. Careful analysis was then directed toward this teaching-learning experience, so that colleagues learned to evaluate teaching behaviors and gained new insights that had immediate consequences for their own classroom practices. This process of reflection, of giving teachers time to think, consistently resulted in greater instructional clarity that was linked, over time, to gains in student learning.

Little's (1984) case study of the implementation of two professional development programs lends additional support for these ideas. Contrasting a traditional "pull-out" inservice program with a school-based inservice program of exactly the same content, she found that the content delivered in the traditional program remained largely unimplemented after a three year period, while the opposite was true in the school-based program. Unlike the "pull-out" inservice plan, the school-based plan involved collective decision-making by both teachers and principals, ongoing and frequent exchange of ideas and assistance among colleagues, evaluative feedback by principals that articulated with inservice goals, and, of equal importance, extended time that allowed teachers gradual and incremental command over new practices and cumulative discovery of the ways they could be used in classrooms.

Teacher Efficacy

By now it may seem evident to the reader that some of the same sources of professional development and renewal for teachers, so vital to their self-fulfillment and school commitment, also increase their efficacy about instructional practices and students' learning capabilities (Rosenholtz, forthcoming).

Learning Opportunities

For teachers to approach their work efficaciously, schools must provide opportunities for them to transform less into more successful practices, thereby increasing their confidence about both their own and students' capacities. That is, the act itself of developing and pursuing an alternative and more successful course of action draws attention to teachers' efficacy, to their sense of making things actually happen with intentional striving.

Goal specificity. However, as we have seen in the previous section, learning opportunities involve a complex set of school conditions, each with their own transformation potential. First, is goal specificity where teachers and principals share responsibility for deciding the school's instructional priorities and criteria for their attainment. Goals that are clear and specific increase teacher efficacy by reducing the often ambiguous, conflicting, and diverse role demands placed on them (for a review, see Rosenholtz, 1985). When teachers strive toward goals that are vague and unclear (e.g., "I want to make students feel good about themselves"), they often fall short of their expectations more often than meet them. If their losses outweigh their gains, declines in teacher efficacy are an inevitable outcome. But, when teachers are mobilized in pursuit of common, clear purposes and feel shared commitment to an achievable enterprise, greater efficacy follows (e.g., Ashton & Webb, 1986).

Evaluation practices. Learning opportunities also increase with clear and frequent evaluation practices with teachers, again, sharing decision-making responsibilities with principals in formulating evaluative criteria. Helpful suggestions and assistance by principals, based on clear, shared goals, arm teachers with greater instructional knowledge and greater certainty that their target of student learning is within sight. Azumi and Madhere's (1983) study of 52 urban elementary schools illustrates the relationship between teacher evaluation, teacher certainty, and student achievement. The extent of observational feedback by principal or colleagues substantially increased teachers' efficacy in their instructional practices, regardless of the school's SES or the length of teachers' experience. And, the frequency of observational feedback combined with teacher efficacy to explain substantial variation in student learning gains between schools. The greater the amount of helpful feedback, the more teachers collectively believed that they could bring student learning about and the more material students actually mastered.

Teacher collaboration. Finally, learning opportunities heighten with faculty collaboration, increasing the number of knowledge exchangers within schools, augmenting teachers' instructional repertoires as they confront instructional decisions and, thereby, their confidence as well. Supporting this point is the Glidewell et al. (1983) study of elementary teachers from ten Chicago schools. Repeated instructional interaction among colleagues increased teachers' beliefs about the availability of professional knowledge. Teachers' beliefs that professional expertise was available from colleagues and their goal clarity combined to account for nearly all the variation in teachers' sense of efficacy. Essentially, teachers' continuous interaction with colleagues that pivoted on clear goals increased both their confidence about teaching practices and technical knowledge available within their schools (see also Ashton & Webb, 1986). Further, Rosenholtz (forthcoming) found that faculty collaboration actually reduced teachers' collective complaints about problem parents and students, as the exchange of advice and assistance solved more, and caused fewer, classroom discipline problems.

Parental involvement. One of the clearest findings from educational research is that the socioeconomic background of students and the learning resources available in their homes powerfully affects their academic growth. There is little, to be sure, that schools can do to alter the formal education and occupation of parents, parents' income, or the presence or absence of parents. But researchers have recently turned their attention to more alterable factors——what schools ask parents to do in their interactions with children——that might decrease or enhance learning success. Strategies through which schools increase the willingness and capability of parents to help their children do better in school include "home based reinforcement programs," where teachers send a note or call parents who institute some prearranged contingency depending on the behavior the teacher wants changed; increased parental supervision of students' homework; greater parent involvement in classrooms; and home tutoring, where parents are asked to read aloud to their children, listen to their children's reading, help with homework, give spelling or math drills, and play learning games with materials provided by teachers (Hawley & Rosenholtz, 1984; Epstein, 1986, in press).

Most schools ignore this potentially powerful resource, however. Epstein (1986, in press), surveying a Maryland sample of parents, students, and teachers from 600 randomly selected elementary schools, found that 58% of the parents rarely or never received requests from the teacher to become involved in their children's learning. Over 70% were never involved in any activities assisting the teacher; even for those parents who did work in classrooms, their participation averaged only a meager 4.1 days during the school year.

Added to this, fewer than 30% reported that teachers gave them ideas on how to help their child in reading and math. Yet, 80% of parents felt they could spend more time helping children at home--on the average over 40 minutes--if they were shown how to do specific learning activities, and 85% spent 15 minutes or more helping their child at home when asked to do so. School-home communications were also remarkably poor: Over 35% of the parents reported never having a parent-teacher conference during the year; 60% never spoke to their child's teacher on the phone (Epstein, 1986). And, although 95% of the teachers reported some contact with parents, they admittedly were not deep, detailed discussions of children's progress. Not unexpectedly, parent involvement and communications between home and school occurred most frequently where principals actively supported and encouraged these efforts (Epstein, in press).

For several reasons, the extent to which schools actively involve parents in the learning efforts of their children directly affect teachers' efficacy (Rosenholtz, forthcoming). First and most obvious, parent involvement in their children's learning represents an extra teaching resource that reinforces teachers' efforts and, therefore, their confidence about attaining professional success.

Second, working with parents may help teachers better understand their students, enabling them to develop individualized, rather than standardized, solutions to problems as they arise. Rosenholtz (forthcoming), for example, found that, in schools where parents actively participated, most teachers perceived students as unique individuals and devoted considerable time and effort to solving classroom problems. Their search for an appropriate solution to students' classroom difficulties, whether academic or behavioral, involved data gathering from multiple sources--students, parents, colleagues, and principals--to broaden their knowledge of pupils' problems and needs. And, their search resulted ultimately in the development of custom-made solutions. In schools that did not encourage parent involvement, teachers tended to define classroom problems solely in terms of student misconduct and conducted only a limited search for alternative solutions along familiar and well-worn paths, seeming to select the first acceptable one that came along--usually meting out punishment. It is not surprising, then, that the most academically successful elementary schools, unlike less successful others, take deliberate steps to actively involve parents in their childrens' learning (Epstein, in press; Purkey & Smith, 1983; Schneider, 1985).

Third, parent participation may reduce the uncertainty of teachers because of shared understanding and efforts--the feeling of working cooperatively with parents toward achieveable goals. Epstein (in press), for instance, found that students whose teachers frequently involved parents reported greater similarity and familiarity between their homes and their school and more regular homework habits, regardless of differences in parents' SES, race, working and marital status. Further, the extent of parental involvement led parents to believe they *should* help their children, and they possessed greater knowledge about teachers' instructional programs (Epstein, 1986).

Distrust and distance develop between parents and teachers where the school does little to bring them together, decreasing teachers' sense of efficacy by fueling the destructive fires of collective collegial complaints. Indeed, in the Epstein and Becker (1982) comparison of teachers, those who did not encourage parent participation complained far more about the failure of parents to teach their children proper manners and behavior required in school. Ashton, Webb & Doda

(1983) chronicled these effects more precisely. Unefficacious teachers in their sample became frustrated when they perceived that parents did not take an active interest in their child's learning. This lead them to conclude that parents were not interested in the school program and did not appreciate their efforts. As a result, they often reduced contact with parents or ceased communicating with them altogether. The idea that individual schools can generate their own level of parent problems through their organizational arrangements was readily apparent in Ashton and Webb's data: Greater communicative distance with parents was associated with more standardized treatment of students and, consequently, with less effective solutions to students' classroom problems.

Fourth, involved parents are more likely to focus their childrens' attention on the importance of schooling, lessening the likelihood of student disengagement, and thereby increasing teachers' efficacy. Indeed, in Epstein's (in press) work, where teachers used frequent parent involvement practices, students themselves reported more positive attitudes toward school, irrespective of their parents' SES, race, working or marital status.

Finally, parents who are involved in their children's learning through school efforts signal legitimacy of, and respect for, teachers' expertise, increasing their sense of professional efficacy. Epstein (1986) found, for example, that where teachers both involved parents in and communicated with them about their childrens' learning, parents recognized that teachers worked hard and possessed valuable expertise and interpersonal skills.

If commitment to teaching depends in part on both receiving recognition for work *and* experiencing work as meaningful, parent involvement by schools becomes most crucial. If parents believe the school has failed to do what it is supposed to do for want of active participation in their childrens' learning, teachers will suffer lower approval and support, greater conflict and tension, and their beliefs and efforts in serving students successfully may wane. That is, if teachers perceive that parents do not support or appreciate their efforts, the nature of work may seem, and may be, less controllable and beyond their capacity to succeed. And, because they are motivated to enhance their self-esteem, teachers will blame their lack of teaching success on parents and students themselves. And, the more teachers complain about difficult parents and children, of course, the stronger their conviction that their potential for classroom success lies outside their control. This constant accentuation on the negative for those whose major motivation in entering the profession was to help students learn, ultimately makes teachers resent "ungrateful" students and parents themselves.

Managing student behavior. The school's failure to collectively manage student behavior and the principal's lack of support for teachers confronting student discipline problems also encourage teachers to talk more about problem parents and students (Rosenholtz, forthcoming). More standardized solutions to discipline problems that avert direct threats to their authority and classroom order channel teachers away from instructional success, albeit unwittingly. Ashton and Webb's (1986) systematic observation of high and low efficacy teachers, for example, revealed dramatic differences in their treatment of unruly students. Efficacious teachers were less likely to appear threatened by behavior problems and handled them quietly and directly, without public embarrassment of students or classroom dismissal; low efficacy teachers experienced far more instances of student misbehavior overall and dealt with them by publicly demeaning students and excommunicating them from their classrooms. Similar kinds of messages are to be found in the work of Barfield & Burlingame (1974) and Denscombe (1985): Low efficacy teachers employ substantially more custodial control tactics than teachers with greater efficacy.

At the same time, the more teachers publicly demean students, the greater the threat to *students'* self-esteem, and the less willing they are to work (e.g., Deci et al., 1981; deCharms & Muir, 1978). That is, student dignity, just like that of those who govern them, is particularly

vulnerable where their ability is called into question. They, too, engage in maneuvers to recast their definitions of classroom success in ways that put themselves in the most favorable light. Especially in the latter elementary grades and beyond, deviant peer cultures based upon resistance to classroom control take precedence over school concerns where students' academic success is put in doubt. Instances of student misbehavior and underachievement increase disproportionately in attempts to limit the nature and extent of teacher control and thereby to derive alternative sources of self-esteem and status from their peers (e.g., Denscombe, 1985; Rosenholtz and Simpson, 1984). This explains, more clearly, why low efficacy teachers experience far more instances of student misbehavior than their efficacious counterparts. Therein lies a fundamental paradox: Where student aspirations and teacher expectations complement each other in mutually-held views of limited academic progress, control orientations tend to become highly salient features of their classroom lives. Each battles the other to protect their respective dignity——teachers by controlling, students by refusing to be contolled——and each contributes willfully to the other's almost certain instructional demise.

To complicate the issue further, as Denscombe (1985) observed in his authoritative review of research findings, teachers who perceive students as lazy, noisy, and troublesome often cease to struggle to get them to work because control problems are so great. Indulging normally unacceptable forms of behavior, they come to regard classroom disruption as a "normal" state of affairs and withdraw from confrontation with students rather than engaging in embarrassing and self-defeating efforts to assert control. By side-stepping the need to confront and fail, quite ironically, indulgence and withdrawal can be counted among the many strategies teachers use to preserve and protect their sense of self-esteem.

Implications for the Design of Teacher Induction Programs

In this paper, I have sketched, in broad strokes, several school conditions required for teachers' productive commitment to schools: Psychic rewards, task autonomy and discretion, opportunities for learning, and efficacy about their work. I have also painted a rather dismal and discouraging picture of the consequences where these workplace conditions fail to be met: teacher dissatisfaction, absenteeism, or outright defection. Each represents a point along a continuum leading to a lack of commitment, and all trigger the search for ways to salvage teachers' sense of self-esteem from the work setting at the expense of student learning.

In considerable detail, I outlined how schools can be structured to enhance teachers' learning opportunities and their sense of teaching efficacy, placing particular emphasis on beginning teachers whose attrition from the profession is notably high. Each of these organizational conditions relates strongly to teachers' academic success with students and the psychic rewards teachers can accrue, thereby enhancing their workplace commitment.

If the intent of teacher induction programs is to persuade newcomers, particularly those with the greatest academic talent, to stay in the profession and to contribute productively, then schools should provide novices the following experiences:

1. Initial teaching assignments that place them neither in the most difficult schools nor with the most difficult students;

2. Discretion and autonomy to make important classroom choices with information about options and possibilities gained through opportunities to participate in decision-making with colleagues and administrators;

3. Clear goals set by administrators, colleagues, and beginners themselves toward which they should initially strive;

4. Clear, frequent, and helpful feedback from administrators and colleagues about the progress they are making with suggestions to help them improve;

5. Regular encouragement and acknowledgement of their efforts by building administrators and colleagues;

6. A school ethos that explicitly encourages them to ask for advice when needed and to feel non-threatened when others offer theirs;

7. Opportunities to talk frequently with more expert colleagues about teaching problems and possibilities, to observe them at their work, and to be observed by them;

8. Encouragement to continuously experiment with new teaching ideas and to enjoy colleagues who do likewise;

9. School-wide standards for student conduct that beginners can be helped to enforce consistently;

10. Opportunities for beginners to participate in school efforts that involve parents in their children's learning and that keep parents regularly informed.

Many of these conditions, to be sure, call for fundamental changes in the organizational and social arrangements of most schools. With them, however, beginning teacher retention and students' academic success will become less an anomaly and more a common expectation.

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THE ROLE OF HIGHER EDUCATION IN INITIAL YEAR OF TEACHING PROGRAMS

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Overview

In this paper we address what we believe to be appropriate roles for those in institutions of higher education in terms of enabling beginning teachers in their initial years of teaching. The lack of support provided to beginning teachers and the demands placed upon them present formidable problems in many instances. There is much that could be done to address these problems that isn't done at present. The lack of attention to the needs of beginning teachers could be because the problems appear to be viewed largely in terms of achieving a productive and satisfying first year of teaching. The problems associated with beginning teachers have not been a priority for those responsible for first year teachers, let alone by those in schools and colleges of education from which they graduated. We suggest the problems should be viewed more from the perspective that most preservice teachers understandably are not as prepared to assume full teaching responsibilities as are more experienced teachers. We typically expect too much too soon from these beginners. Continued on the job training and continuing personal support in a complex new role are appropriate expectations. We believe that the problems of beginning teachers are more serious than commonly understood. By personal account, many teachers struggle to provide adequate instruction. By actual number the majority leave within 5 years after graduation. Surely lack of needed assistance at the outset of teaching contributes to this.

Therefore, we begin by emphasizing that major changes in funding arrangements and cooperative working relationships are called for if real inroads are to be made in terms of advancing the effectiveness of beginning teachers and retaining many able and caring beginning teachers for longer periods of time. While we should be modest in our expectations initially, we believe that over time substantial gains can be achieved. New or modified roles and role-relationships by both those in schools and in higher education and altered expectations and responsiblities for beginning teachers will take time and, in many respects, are preconditions to the level of success beginning teachers will achieve.

We proceed, then, on the following assumptions: 1) much of the formal curriculum new teachers teach, the way this is taught, and the myriad non-instructional responsibilities of teachers are first encountered on-the-job; 2) induction schemes which provide continuing opportunities for learning and personal support should be viewed not as peripheral niceties, but rather as necessities for many beginning teachers; 3) the initial education of teachers is, in fact, a *joint* responsibility of those in schools and colleges of education and those in K-12 schools, and it extends well into the beginning years of teaching; and 4) while these problems will not be corrected immediately, it is long past time that we initiate more intensive intervention to confront them.

In this regard, then, we have identified the following activities in which we believe institutions of higher education should engage almost always in concert with those in schools, to contribute to more ideal forms of assistance to beginning teachers than exist at present:

> Assisting in the identification, explication and resolution of problems and issues attendant to entry-year assistance; analyses which can lead to sound policy formulation;

Given major reponsibility for the preservice education of teachers, more clearly communicating, than at present, realistic standards of performance as well as what is needed in terms of further growth during the first year;

Clarifying and establishing *realistic* ongoing working relationships with those in K-12 schools and negotiating appropriate divisions of labor for these two parties;

Providing direct services in the way of continuing education to beginning teachers;

Providing indirect services to the beginning teacher through a variety of services to mentors or master teachers who will work with beginning teachers. These include:

a. assistance in defining roles and responsibilities for mentors
b. identifying incentives that will attract mentors
c. assisting in selection criteria
d. providing various forms of training
e. assisting in matching mentors and inductees or new teachers
f. providing continuing support for experienced teachers in these new leadership roles;

Helping to establish conditions which allow for more clinical, reflective and inquiry-oriented approaches to teaching and learning to teach;

Providing a model for induction activities mutually beneficial to mentors and beginning teachers that incorporates knowledge of classrooms, observation procedures and supervision practices; and

Providing direction for needed research in how best to proceed with providing assistance and enabling beginning teachers to better learn how to teach on the job.

Assistance in Policy Analysis

There are a number of unresolved issues which need to be addressed in the design and development of assistance programs for beginning teachers. Numerous persons with various expertise in institutions of higher education could be involved in resolving issues such as the following:

1. What are valid performance standards for beginning teachers and how are they established?

2. How are beginning teachers assessed in a reliable manner against these standards?

3. How are these standards related to preservice curricula?

4. How are these standards related to the training of different kinds of mentors or master teachers who will work in various ways with beginning teachers?

5. How are these standards and the beginning teachers' ability to meet these standards related to the critical matters of preservice program approval and to the level and type of teacher certification achieved *initially?*

6. What might be done to better assess the difficulty of various teaching assignments and to correlate that assessment with the type and degree of support and assistance provided to beginning teachers in these different assignments?

7. What are appropriate criteria for the selection of mentors or master teachers? Who should be involved in their selection?

8. What would constitute efficacious training programs for these mentors or master teachers? Should levels and forms of training for these experienced teachers be tied to some form of licensure or certification?

9. What type of financial reimbursement should be provided to teachers who assume this leadership responsibility?

10. What other responsibilities could be combined with this mentoring function? How might these roles be related to career ladders?

11. Should these mentors cross school and district lines and if yes, how is this enabled?

12. How often and to what extent should, and can, both the experienced teachers and beginning teachers be released from classroom responsibilities?

13. What logistical arrangements and what financial costs are entailed here?

14. In what ways can instructional quality best be sustained in the classroom when teachers are released from these classrooms?

15. How are the quite different functions of assessment and evaluation, on the one hand, and continued learning and psychological support, on the other hand, sorted out vis-a-vis the role of mentors?

16. What roles and responsibilities can different agents and agencies assume in addressing the issues above?

The list could go on. The complexity of some of these problems should not be underestimated. For example, Bird (1985) suggested that the very title which is given to the experienced teachers who assist beginning teachers has potential issues attached to it:

> The visibility of teachers' work, the acknowledgement of excellence, and mutual understanding of teaching are prominent issues in cooperation among teachers in the application of research to teaching and in leadership by teachers. "Advisor" refers to one who offers information or opinions which may be accepted or rejected. This name appears to be too timid for the influence which is implied in a mutually understood craft, or in the emergence of leaders through close interaction, or the formal recognition of excellent teachers. Further, "master," "mentor," and "advisor" each name half of a relationship. The other halves are "apprentice" or "novice," "protege," and "client." While "novice" and "new teacher" are used in schools, they typically describe a personal condition rather than a standing relationship in a craft. Who in schools values the title and standing of "novice" or "protege," and on what grounds? The adoption of the titles are worthy, or useful, or shorthand for demanding relationships and exchanges. Behind the names are fundamental

questions about the fitting and fruitful principles for cooperation and leadership among teachers. (pp. 2,3)

Our position, then, is that the first order of responsibility for those in higher education is to identify the major issues and problems and to assist in thoroughly analyzing them. While those in higher education might have no special insights into many of these problems, they do have a responsibility for addressing them and for contributing to informed policy formulation to guide assistance to teachers in their entry year.

Communicating Clearly What Can and Cannot Be Done in Preparation Prior to the First Year of Teaching

The Teacher Induction Study (Edwards, 1984) suggested that in several instances the *technical* aspects of beginning teaching and demonstrating compliance with state mandates for certification overrode the original spirit and intent of induction schemes, which included providing numerous forms of continuing education and support to beginning teachers. Further, Griffin (1985) concluded from three major studies in which he was engaged that:

1. Teaching is increasingly constrained by narrow conceptions of teacher behavior;

2. Expectations for teachers, typically derived from recent research into teaching effectiveness, are commonly pitched at the level of technique;

3. Policy mandates for certification, proposals for rewarding meritorious behavior, and claims about mastery are currently more often based upon conceptualizations of what might be called "microbehavior" than they are upon the teacher as a total professional.

We (Howey and Zimpher, 1986) recently concluded studies of preservice teacher education programs in a variety of institutions throughout the Midwest. In these studies we examined, in some detail, the curriculum in which prospective teachers engage and the instructional practices which are modelled for them. We concluded that, in many instances, both the daily practical problems which confront classroom teachers and also the knowledge bases which contribute to make teaching a more scientific endeavor are inadequately addressed in preservice programs. For example, we found limited evidence that these teacher preparation programs attended adequately to an understanding of the politics of schooling or to the development of social relationships in schools. In many instances the quantity and quality of opportunities for learning how to teach in the basic subjects for which a teacher is responsible appear wanting as well.

Again, there are definite constraints on what can be attended to and mastered in the limited time currently provided in most preservice programs. Teaching is a complex craft which is increasingly informed by scientific inquiry. It has obvious moral and political dimensions and the responsibilities of a teacher extend far beyond the classroom. Unless, as Griffin has indicated, the role of the teacher is conceptualized in more manifold and complex ways, teacher education will continue to be approached primarily in terms of prescriptive techniques. Those responsible for the initial education of teachers have to acknowledge the limits to what they can achieve more forthrightly and identify more specifically what continuing forms of education need to be addressed in the first years of teaching.

While we contend that there is much yet to learn after a teacher has completed a preservice program, we must remain realistic about what can be achieved in one more year while the beginning teacher is largely assigned responsibilities for teaching. Huling-Austin (1986) concluded the following after studying some of the first attempts to provide induction programs:

> In the event that beginning teachers are provided with ongoing support grounded in a clearly articulated vision of successful teaching, it is unrealistic to expect induction programs to assist beginning teachers to function satisfactorily in a situation in which experienced teachers would also have difficulty. Induction programs are not likely to be powerful enough to overcome major problems related to the school context. In the Teacher Induction Study, a study of two state-mandated induction programs, the programs were found not to be powerful enough to overcome misplacements (a teacher assigned out of his/her discipline) and overloads (too many preparations). (p. 3)

Establishing a Reasonable Working Relationship and an Appropriate Division of Labor with Those in K-12 Schools

Once the mission and goals of an induction program are clarified, then the responsibilities of various parties, certainly including those in institutions of higher education can be clarified as well. There are a number of longstanding constraints to the involvement of college-based teacher educators and other academics in school settings. Several of these are economic in nature. Most institutions of higher education must attend to faculty responsibilities in terms of student credit hours. For example, relatively larger classes in preservice teacher education commonly allow schools and colleges of education to offer smaller seminars for advanced graduate students. While many forms of service to schools occur, these typically do not "pay the freight," and thus are commonly handled through negotiations between individual faculty members and various personnel in school districts. In fact, in many programs which prepare teachers, faculty have but minimal involvement in the student teaching or clinical component of the program because of the costs associated with this activity. Rather, these responsibilities are assigned to advanced graduate students, adjunct faculty, or persons who are provided specific clinical responsibilities at lower salaries than academic faculty and who typically assume a lower form of citizenship in academic circles as well.

The politics of higher education deserve brief review here as well. It is common knowledge that in research-intensive institutions, the overriding expectations and concomitant rewards for faculty are to orient themselves to scholarly activity. Teaching responsibilities are, of course, a common expectation as well. However, sustained collaborative involvement with schools is not typically rewarded in these types of institutions. In those institutions of education which could be defined as basically teaching institutions there is more of a disposition to be involved in the clinical component of programs. But again, the willingness and ability to engage in protracted working relationships with colleagues in the K-13 sector is not common because of the press of other priorities in these institutions, not the least of which are considerably heavy teaching loads.

The constraints to sustaining working relationships with those in schools, however, are more than economic and political in nature. There are basic sociological conditions which exist and deter faculty from such endeavors. Carey and Marsh (1980) speak to this:

> However, the power relationship is structured differently between professors and inservice teachers. Preservice teachers and doctoral students come to the university with several common characteristics. These students come: (a) as individuals, (b) needing a degree and/or credentials, and (c) without powerful institutional support. Inservice programs, on the other hand, are often for groups of teachers who do not need the additional degree or credential. Teachers in inservice programs often have implied support from a school district and/or a teacher organization. Moreover, the knowledge gap between professor and inservice teacher is much less than between professor and preservice teacher and inservice programs are often held on teachers' "turf." Consequently, faculty members and inservice students often negotiate their

programs; many faculty members are neither familiar with nor skilled in such negotiations. . . (p. 50)

The problem is still further compounded when those in higher education attempt to take on certain tasks such as a major contribution to the training of master teachers in entry year or induction schemes. As Bird (1985) illustrated:

> Conservative assumptions made earlier are that persons who select and train master teachers do not themselves possess the status *master teacher* in teachers' eyes and that, even if they do, they cannot confer it to new master teachers by selecting or training them. That is not a comment about trainers but about school organization; there is too little precedent for master teachers. To work together, teachers and master teachers will need to share--and to know that they share--some understandings of teaching, some aims for improving teaching, and some knowledge of the ways in which they can work together. They need reasons to believe that they can satisfy the requirements of reciprocity in their new status relations. (p. 12)

Given these long-standing obstacles it would be naive to think that those in higher education will assume major roles and responsibilities in entry year assistance *without major alterations in policy, funding and incentives* as we indicated at the outset. Beyond that, it is apparent that more authentic shared responsibility as Bird suggested will have to be achieved, especially in the preparation of master or mentor teachers.

Carey and Marsh (1980) provided comprehensive guidelines for schools and colleges of education to work collaboratively with local school districts based upon previous studies they conducted of such efforts. They underscored that schools and colleges of education must systematically and realistically review their potential for, and interest in, cooperating in major projects with school districts. They included the following activities in the planning process:

1. Recognize a need for a new program to cause the SCDE either to expand its mission or better fulfill an existing mission.

2. Obtain a complete, general description of overall goals for the new program and rationale for program development [in this situation, induction].

3. Obtain a firm commitment from leaders of the SCDE and school district that identified goals are related to the mission of the institutions and that changes or innovations brought about in achieving these goals are desired in long-range institutional development.

4. Secure personnel to manage initiation activities.

5. Conduct an organizational analysis to identify various types of constraints and resource possibilities [as we discussed above].

6. Refine the overall goal statement in light of organizational analysis and perform an "enabling goal analysis" to identify various programs needed to bring about the realization of broad inservice [induction] program goals.

7. Determine the SCDE's and the school district's responsibility for each enabling goal and the groups within each institution most appropriate for achieving each goal.

8. Identify roles to be played by interacting groups within the SCDE and the school district and build ownership and involvement in the program by these role groups.

9. Obtain consensus from each group that: (a) the overall goal is indeed in keeping with their long-term goals, (b) the role for which they have been identified is in keeping with their perceptions for their professional responsibilities, (c) they will cooperate in the development and implementation of the new inservice [induction] programs, and (d) they will perform duties in keeping with their understood roles and responsibilities. (p. 73)

We are not sanguine about the likelihood of many institutions of higher education to engage in such comprehensive planning as suggested above, even with financial support and legal authority calling for their involvement in entry year schemes. Nonetheless, one of the major responsibilities for those in institutions of higher education preparing teachers initially will be to seriously examine if and how they will be able to contribute in *sustained* ways to entry year programs.

In summary of this point, we suggest that there are *two* major ways in which institutions of higher education will eventually contribute directly to entry year programs. That is, by providing continuing education to the first year teachers themselves and, as we indicated at the outset, by contributing in a variety of ways to the development of master or mentor teachers. The organizational analyses which Carey and Marsh (1980) suggested would flow from the specific types of goals which we outline next, wherein different types of institutions of higher education will have to determine how they can best contribute in collaborative ways to new teachers and to mentors.

Direct Services to Beginning Teachers

We will not dwell on this specific topic at any length as the process and content of instruction provided beginning teachers is dealt with elsewhere in this collection of papers. We reiterate, however, that there appear to be numerous limitations and gaps in the typical preservice curriculum for prospective teachers. Likewise, opportunities of a quality nature for learning how to teach are often lacking. Certainly, one could view initial teacher preparation in terms of a spiral curriculum where many basic concepts, much of the knowledge base, and numerous pedagogical skills and dispositions would be *revisited* in an indepth way during the beginning years of teaching under the guidance of mentors or master teachers. This is to say that most of what teachers study in their initial preparation is obviously enriched and expanded upon through experience but that these experiences should be structured much more formally.

General program goals could be, and have been outlined for beginning teachers. As an example, an induction scheme developed in Wisconsin reported the following goals (Varah, Theune, Parker, 1986):

1. To provide a planned first-year teaching experience that makes possible a broad variety of professional learning experiences.

2. To reach a level of professional skill and judgment that characterize a well-qualified career teacher.

3. To raise professional competency to a level distinctly above that of the beginning teacher holding a bachelor's degree.

4. To re-examine numerous teaching techniques and instructional strategies and to experience others.

5. To develop extensive professional understanding and familiarity within the inductee's scope of certification.

6. To synthesize various learning theories and to study their application to different types of teaching and learning situations.

7. To develop an individual teaching style based on broad observation, discussion, and consultation. (p. 31)

We suggest, however, that more specific goals and objectives are necessary for these beginning teachers and that *standards* need to be attached to these as well. One of the fundamental issues which must be addressed in entry year assistance programs is to achieve some balance between providing continuing educational and personal support for beginning teachers and, at the same time, engage in accountable assessments of these novitiates' ability to teach. It appears that in a number of early induction schemes little screening of beginning teachers from teaching has occurred. If these induction programs are perceived as merely providing support and not serving a critical screening function as well, surely they will not accrue needed financial support in the long run. Rauth and Bowers (1986) reviewed a series of induction articles which were published in a recent edition of the *Journal of Teacher Education*. They concluded that scant attention was given to this critical assessment function:

> A number of the preceeding articles describe specific induction programs. All of them offer ideas to consider how to structure the induction process. However, because we lack common norms and standards and a shared technical language, it is impossible to judge the utility of mentor training, seminar work, and various types of assistance in these programs. Again, success will depend upon the quality and insights of individuals involved, not standards of the profession. To remain satisfied with this condition jeopardizes the prospectus of professionalizing teaching. (p. 39)

In summary to this point, considerable thought should be given to the curriculum which is to be provided beginning teachers and to the role which those in higher education can perform in this regard. While these goals and objectives will obviously vary from program to program, it appears equally apparent that in state-supported induction schemes there will be some common goals for beginning teachers and some standards attached to these as well. Given the direct link with what is studied initially in preservice programs, the responsibility of higher education teacher educators is considerable.

Services to Mentors or Master Teachers

There are a variety of ways in which the role of mentors or master teachers can be construed and a first service, which those in preservice can provide relative to mentors, is helping to define the role. Anderson (1986), for example, has identified four different types of mentors in a scheme he developed in Minnesota. His goal was to establish some division of labor among mentor roles in terms of the reponsibility for assessment as opposed to responsibilities for support and continuing education, among other possible functions. The following are brief descriptions of responsibilities for each of these roles:

Clinical Mentor:	An experienced classroom teacher who nurtures the growth and development of a group of beginning teachers by systematically observing their classroom instruction and providing feedback to them on a regular basis.

Colleague Mentor:	An experienced classroom teacher who, in addition to teaching full time, supports, encourages, and advises beginning teachers as they carry out their day-to-day teaching responsibilities.
Consultant Mentor:	An experienced classroom teacher with expertise in an area of curriculum and instruction who is available to consult with beginning teachers as the need arises. Consultant Mentors have expertise in such areas as classroom management, lesson development, and instructional strategies.
Community Mentor:	A member of the community who, on the basis of his or her specialty, helps a beginning teacher develop professionally and/or personally. For example, a Community Mentor may be a newspaper editor who provides support to a new journalism teacher or a parent with highly-developed skills in photography who helps a beginning teacher unfold his or her interest and potential in this area. (p. 5)

Clinical Mentors would be hired full time by the school district. Colleague Mentors will not receive additional salary but would be supported for such functions as taking a beginning teacher to lunch or coffee on a continuing basis. In addition, they would be supported for attending conferences related to the task of mentoring. Consultant Mentors would be reimbursed on an hourly basis as they deliver their services to a beginning teacher. Community Mentors would be similarly reimbursed. All four types of mentors would receive recognition for their work in various other ways such as with certificates, special recognition, and opportunities for publication.

Other job descriptions for different types of mentoring functions could be generated. Certainly there is no need to start from scratch here. Numerous mentor models are now in existence and, beyond this, teachers across the country are involved in a variety of leadership roles or extended role assignments, where, with some modification, they could assume a mentoring role. For example, a recent study in the state of Michigan (Hatfield, Blackman, Claypool, & Mester, 1985) found that up to 20% of teachers across districts engaged in extended role assignments and that the responsibilities which they assumed were represented by over 50 different job titles.

Further, there are many fields of endeavor where mentoring is more of an informal process and the protege, inductee, or beginner seeks out a mentor because of certain qualities. As Anderson suggested, there can be both formal and informal mentoring in the same induction or entry year assistance scheme. Zey's (1987) studies suggested what proteges in other enterprises look for in selecting a mentor to work with them in a more informal manner:

1. Is the mentor good at what he/she does?
2. Is the mentor getting support?
3. How does the organization judge the mentor?
4. Is the mentor a good teacher?
5. Is the mentor a good motivator?
6. What are the protege's needs and goals?
7. What are the needs and goals of the prospective mentor?
8. How powerful is the mentor?
9. Is the mentor secure in his/her own position? (p. 167)

A second function beyond defining mentor responsibilities and attributes where those in higher education might be of assistance to those in schools is working together to ensure that necessary conditions exist for the mentor and beginning teacher to work together in harmonious and

productive ways. Lewis (1979) identified what she believed to be some of the essential characteristics of an induction scheme in order to support the type of ongoing relationship generally envisioned between mentors and their proteges:

1. New teachers are given a *reduced workload* during the first year of entry into the profession.

2. New teachers are given *release time* to continue their studies in relationship to their work; this study includes an analysis of what is happening in their classrooms.

3. New teachers are given time and assisted in better understanding their *new relationship with other staff and with the community* and are able to observe other teachers working.

4. Opportunities for *peer discussions* among new teachers are provided in an atmosphere that encourages openness and problem/feeling sharing.

5. A *mentor is available* and willing to work with each new teacher. Preferably, this is someone who works with the same grade level of students or in the same curriculum area. It may be a cooperating teacher from the same district, or a university staff person designated to provide assistance. (p. 57)

Certainly one could add to this list that the mentors are released for a substantial portion of their time as well to attend to these responsibilities. A variety of arrangements exist and still others could be envisioned whereby mentors work either solely with one beginner or, in fact, have responsibility for a number of beginning teachers. This ratio, obviously, would determine the extent to which mentors are released from their responsibilities. There are schemes whereby mentors are totally released from their instructional responsibilities for a specific period of time, say one to three years, and, in other instances, the mentors are released for up to half-time from their instructional responsibilities to work with one or two beginning teachers.

The extent to which time is found to release both parties can be critical to the type and quality of interaction which occurs between them. Edwards (1984) reported that there is wide variation in the quality of these relationships:

> In some cases the administrator functions as leader, initiating and directing activities; in a limited number of cases it is the experienced teacher or the other educator who takes the lead. The perceptions of each individual's ability and qualifications vary as does the weight granted to the individual's opinions and contributions. In some cases data indicate that little occurs beyond perfunctory compliance with physical requirements, i.e., attendance at meetings, presence in classroom and paperwork turned in. In other situations the team appears to function as a competent and highly motivated unit in providing support and guidance for the first year teacher. (p. 10)

In addition to working towards policies that ensure adequate release time and appropriate types of support activities for both mentors and beginning teachers, those in institutions of higher education can assist as well in identifying conditions, practices, and policies which exemplify the best of what occurs in schools. There is considerable literature about what characterizes schools more effective than others, and most states have supported some form of school effectiveness or school improvement programs for some time now. Those in higher education could assist in

identifying such sites and further develop their capacity. They could also work to ensure that many of these organizational characteristics and faculty norms are also reflected in their own programs.

A third area where teacher educators can assist is in the development of selection criteria for mentors. These authors have addressed this topic in previous writings (Howey and Zimpher, 1986) and we will not review this material here. Given, however, the number of induction projects and mentoring arrangements in existence, criteria for the selection of mentors are available. For example, the California Department of Education (1983) has identified the following criteria for the selection of mentors:

> Demonstrates knowledge and commitment to subject matter.
> Subject matter expertise.
> Ability to convey enthusiasm for the subject to students.
> Demonstrates belief in student ability to succeed.
> Commitment to setting high expectations for students.
> Competence to teach at various student ability levels.
> Willingness to give special attention to students requiring help.
> Success in fostering excellent student performance.
> Gives evidence of professional stature.
> Leadership, e.g., in organizing projects on his or her own initiative.
> Recognition by those in the same profession.
> Respect of his or her colleagues. (p. 7)

A second way to approach the development of selection criteria is to examine common needs identified by beginning teachers (a familiar activity for many years) and assess what these imply for the type of person who would best serve as a mentor. Odell (1986) recently completed a functional analysis of the needs of teachers by recording the forms of actual assistance which were given to first year and "new to the system" teachers in a teacher induction program in New Mexico. The following is an ordering of the various categories of support which evolved:

System Information	Giving information related to procedures, guidelines, or expectations of the school district.
Resources/Materials	Collecting, disseminating, or locating materials or other resources for use by the new teacher.
Instructional	Giving information about teaching strategies or the instructional process.
Emotional	Offering new teachers support through empathic listening and by sharing experiences.
Classroom management	Giving guidance and ideas related to discipline or to scheduling, planning and organizing the school day.
Environment	Helping teachers by arranging, organizing, or analyzing the physical setting of the classroom.
Demonstration teaching	Teaching while new teachers observe (preceded by conference to identify focus of observation and followed by analysis conference). (p. 177)

Not surprisingly, it can be noted that the primary types of support which these first year teachers requested had to do with information about the system and resources and materials. Management, which is typically seen as a need of the first order for beginning teachers, was in this particular study somewhat further down on the list of priorities.

Whatever procedure or procedures are employed, it would seem that teacher educators can assume a responsible role in the development of *selection* criteria that apply to different types of mentoring functions, and in contributing to procedures for those involved in the actual selection process, such as developing instrumentation that might be employed in screening teachers for a mentoring role.

A fourth basic function which those in teacher education can engage in relative to mentors is to assist in providing incentives for teachers to participate in this role. There are numerous examples of how this might be done. An obvious way in which those in higher education can assist is by providing training of a variety of types to these mentors. Beyond this, they can make this training attractive by giving consideration to where it is provided and involving potential mentors in the design of this training. In many instances this training could be done at no cost to mentors involved. There is also the matter of status vis-a-vis those in higher education. In many situations, mentors could be accorded some form of adjunct faculty status for what is basically an extension of initial preparation.

Certainly, the primary contribution by those in programs of preservice education would be to provide direct training to mentors. A mentor's or master teacher's ability to employ a variety of intervention and reinforcement strategies at appropriate times, we believe, will be considerably enabled by knowledge and dispositions which are refined from study in the four domains below:

1. What we know about how adults grow and develop over time, with an emphasis on the relationship of development to teaching.

2. What we know about how cultural and organizational dimensions of schools affect teachers and their work, individually and collectively.

3. What we know about interpersonal influence, especially when employed in light of 1 and 2 above.

4. What we know about creating opportunities for further personal and professional growth.

In terms of the first of these, the literature on adult and human development is rich and diverse. As related papers in this series elaborate, there is considerable literature on stages of adult development. Beyond that, there are a number of scholars who have focused more specifically on age-related concerns. Certainly, we are not suggesting that the various studies regarding adult growth and learning over time will yield obvious strategies for the design of programs to promote further "development" in beginning teachers. However, this knowledge base, diverse as it is, should provide a better understanding of one's self at various stages in one's life and career in relationship to others in this highly interpersonal activity of mentoring.

We referred earlier to the fact that there is a burgeoning literature which falls under the general terminology of school effectiveness, as well as a concomitant literature dealing with school improvement schemes. There have been excellent reviews of this literature by Purkey and Smith (1983), Ralph and Fennessey (1983), and Clark, Lotto, & Astuto (1984). Empirical findings now exist to support what both theory and experience suggest does make a difference from one school to the next. Academically effective schools are distinguished by their culture, by their

organizational structures and by a climate of values and norms which stress high expectations and successful teaching and learning. Certainly, teachers assuming a mentoring role should be conversant with such literature, if not always involved in such a context themselves.

When one thinks about the cultural and organizational dimensions of schools, it is necessary, of course, to include the numerous studies which have looked at the ecology, culture, and organization of individual classrooms. The comprehensive review of studies concerned with the character of academic work by Doyle (1983) is an excellent synthesis of such literature. Likewise, the Johnsons' (1984) extensive synthesis of research concerned with attempts to make classrooms more cooperative is instructive in this regard.

There is an impressive body of literature that addresses how interpersonal influence is exerted. Again, this literature comes from diverse disciplines. Blocher (1975) provides a synthesis of six lines of empirical inquiry which contributes to our understanding of behavioral change: 1) social conditions (relationships); 2) communication processes; 3) public commitment, i.e., how the probability of change in attitudes and behaviors increases when explicit public commitment to that change is obtained through a direct and open negotiation process; 4) cognitive change (representing a variety of approaches including the development perspective shared earlier); 5) social modeling; and 6) operant shaping. Our contention is that familiarity with these various orientations would provide departure points for experimentation by mentors. While exemplary teachers employ numerous strategies derived from these orientations when they interact with whatever age level youth they teach, there are decidely different nuances in working with adults. Thus, study in this particular domain would relate closely to what is known about characteristics of adults and how they change and are changed over time.

Finally, the fourth domain we have identified as appropriate to the education of mentors relates to the uses of various forms of supervision, modes of staff development, and collaborative research. Recently we have been engaged in a professional development project which has attempted to identify more clearly the various purposes which continuing education serves and the variety of formats wherein these purposes can be met. As Griffin (1985) indicated earlier, too often the concept of teaching and, hence, teacher development is considerably constrained. Thus, our goal has been to identify a broader, but interrelated, range of purposes which can be served in continuing education, certainly including entry year or induction phases of a teacher's education. The major purposes which we have identified include: personal, cognitive, theoretical, professional and career development. Just as there are constraints in terms of the purposes that are served in efforts to promote teacher learning and development, there appear to be major shortcomings as well in terms of the type of the activities engaged in to achieve these purposes. We suggest that mentors should be able to engage the beginning teacher in a variety of enabling activities including: The systematic study of youngsters, engagement in structured problem-solving activities, the conduct of action research, the promotion of self-observation and analysis through a variety of conceptual lenses, and demonstration and coaching for more complex instructional approaches.

While our knowledge base here is still scant in many respects, we nonetheless know considerably more than is employed presently in most efforts to further educate teachers. Our knowledge of staff development or continuing education interventions should be an integral part of the training provided for mentors. Certainly, not all of the expertise related to these four domains resides on campuses. Nonetheless, college-based teacher educators can make a major contribution for collaboratively designing programs for the preparation of various types of mentors and then assisting in the actual instruction of these mentors as well.

A sixth responsibility those in preservice teacher education can assume in terms of the mentor role has to do with matching mentors and beginning teachers. There have been a limited number

of studies of mentor-protege interactions in organizational settings other than education. Scholars such as Hunt and Michael (1983) have identified the mentor's age and gender as important characteristics to consider in matching mentors with proteges. The tentative conclusion is that mentors should be older than the protege by at least a half a generation (8 to 15 years). They suggest that when a mentor is a full generation older, say 20 years or more, there is a greater risk that the relationship will be symbolized in parent-child terms and that there are negative consequences attached to this. Kram (1983) also reports that male-female mentoring relationships embrace special problems. Female proteges, for example, typically experience greater social distance and general discomfort in male-mentor relationships. In male-female mentoring relationships, both participants must deal with sexual tensions, public scrutiny, and stereotypical male-female roles. These tentative findings may have applicability as well in educational settings and some consideration should be given to matching mentors and beginning teachers.

The seventh and final function which we have identified as appropriate for those in preservice teacher education to assume relative to mentors is that of providing them continuing support. Bird speaks to one of the fundamental problems which mentors or master teachers will encounter: "Master Teacher" is considerably more than a title and an activity. It is an identity, a standing with others, and a complex combination of craft and principle. Particularly where precedents and traditions of leadership by teachers are scanty, new master teachers will benefit from explicit and instrumental exercise with each other. The task here is to build an *identity group* whose members affiliate and share clear, precise, useful, and influential expectations for their work with teachers.

The identity groups' premise is that the performance of master teachers is not just a "master of style," but that there are better and worse ways, righter and ruder ways, and more or less effective ways of going about it. That is, the members acknowledge the complexity of the performance but do not dismiss the possibility of analyzing it. This premise of work among master teachers is essential because it also is a premise of masters' work with teachers.

The group of master teachers should share experience and sympathy, but should not be content with that. If their group is to help them, it must be a place to struggle toward useful propositions, principles, and tactics of leadership. The group should be organized and led with greater emphasis on instrumental matters than on affective ones. Affective work doesn't always feel good, especially at first. Master teachers' efforts to understand leadership are like masters' and teachers' efforts to understand teaching. In their own group, the masters have the opportunity to make peace with fruitful tension and so learn how to help teachers do the same (Schon, 1983).

We strongly concur with Bird's analysis. Mentoring is not only a new role for most teachers, but one that is more complex and demanding than many acknowledge. One appropriate way in which teacher educators could assist in this continuing support function would be to integrate a strong social dimension into any program designed for further educating them. For example, if mentors were brought together for training across schools or even across districts, activities could be structured over a period of time that would allow them to share their mutual experiences in satisfying social settings and thus, to begin to collectively develop an identity in this new role. Such an effort will require time and facilitation by skilled people. Again, expertise in counseling and psychological support exists in most schools and colleges of education and such faculty could be employed to assist in the development of programs for these mentors.

This then concludes the section of this paper identifying various ways which we believe preservice teacher educators could assist in developing productive mentor/beginning teacher relationships. We view their primary responsibility to be embedded in the training of instructors and, at this point in the paper, we turn to an elaboration of what we believe the critical aspects of this training to be as evolved from the four knowledge domains which we noted earlier.

Contributing to a More Reflective and Inquiry-oriented Approach to Teaching and Learning to Teach

Theoretical Context

Veenman (1984) proposes three perspectives on the development of beginning teachers that could provide a conceptual and theoretical basis for designing teacher induction programs. First is the recognition of the existence of *developmental stages of concern* from teacher concern for survival to improved teaching strategies which focus on learner outcomes. The second perspective, *the cognitive development framework*, focuses on the teacher as an adult learner. This perspective suggests a hierarchy from less to more complex cognitive abilities and further suggests ways to identify levels of cognitive development and to work with adult learners who differ in cognitive ability. The third framework, *the teacher socialization framework*, focuses on how beginning teachers adapt to the role of teacher, give meaning to their beliefs, and adapt to the beliefs of others. These approaches constitute vital references for the thought patterns and belief systems of beginning teachers and the impact of school context on these characteristics. They also pose frameworks for the development of inservice programs to meet the needs of newly inducted teachers. Further, these frameworks go beyond the particularistic reporting of perceived problems of beginning teachers reflected in the multiple studies reported in Veenman's review.

Veenman's analysis leads to another dilemma associated with induction; that is, a basic impediment that exists in terms of university involvement in the evolution of induction programs. Although we reviewed in some detail a number of these constraints earlier, we revisit this concern here relative to the problem of providing a theoretical orientation for induction programs. Veenman attributes the lack of effective university participation in addressing the needs of beginning teachers to the "tension between theory and practice" and concludes:

> Most of the criticism of teacher training is not justified because it arises from an incorrect interpretation of the function of theory. To expect that practice could be deduced from or founded and governed by theory . . . . is a mistaken belief. Theory cannot provide the teachers with how-to-act directions for specific situations; theory has primarily a critical and reflective function and is only constructive in a limited way. . . (p. 167)

We use this dilemma as a point of departure for establishing what we believe is a most appropriate university perspective in terms of its contribution to the development of effective induction programs. Our belief is that theory and practice are intimately related and that this relationship can be facilitated by infusing into beginning teacher programs the notion of developing inquiring professionals——critical and reflective teachers who understand relevant theoretical constructs for induction. The guiding image for such professionalization assumes that teachers develop over time cognitively, technically, and socially. It also assumes that teachers can and should be reflective about practice and can use that reflection to engage in classroom inquiry to improve practice. We believe that substantial attention to the notion of reflectivity and the application of theories-in-action is a long overdue emphasis of most pre- and inservice programs and certainly is applicable to induction programs.

Further, our vision of the inquiring professional includes the provision of opportunities for collaborative action research, defined as an interactive research and development experience. Therefore our intent in the remaining sections of this paper will be to further explicate the notions of reflectivity and collaborative action research as vehicles for developing in inductees a posture as inquiring professionals and we will propose a developmental model for collegial (inductee and

mentor) instructional supervision. We will conclude the paper with a summary as well of potentially useful theoretical frameworks for studying the induction process, given Veenman's acknowledgement that limited studies of this nature have been conducted to date.

The Nature of Reflectivity and Its Relationship to Induction Year Programs

Antecedents for contemporary interest in reflectivity abound in the literature. Most noteably, Dewey's (1904) treatise on the relationship of theory of practice is cited repeatedly in applications of reflectivity to teaching. Particularly, Dewey cautioned against a technical or mechanical focus on teaching which we indicated earlier appears as prevalent now as it was then, as such a focus too easily leads to:

> . . . formation rather than a scientific, sanction. The student adjusts his actual methods of teaching, not to the principles which he is acquiring, but to what he sees succeed and fail. . . . to what he sees other teachers doing. . . and to the injunctions and directions given him by others. (p. 14)

Zeichner (1981-82) incorporates Dewey's observations about reflectivity, which Dewey referred to as reflective action versus routine action, in this observation:

> On the one hand, routine action is that action which is guided by tradition, authority, and the official definitions within a social setting. In routine action, one considers means as problematic but takes for granted the ends toward which they are directed. On the other hand, reflective action, according to Dewey (1933, p. 9), entails "active, persistent, and careful consideration of any belief or supposed form of knowledge in light of the grounds that support it and the further consequences to which it leads." (p. 5)

More recently, the notion of reflectivity has been referenced in Donald Schon's (1983) work on "The Reflective Practitioner." Russell (1986) characterizes Schon's notion of how professionals think in action as follows:

> While the practitioner cannot describe all that he or she knows, surprising or puzzling events often make us think about what we do and know. Reflecting on knowledge-in-action is termed reflection-in-action and Schon attaches fundamental importance to the practitioner's ability to recognize and explore puzzling events that occur during action. "It is the entire process of reflection-in-action which is central to the art by which practitioners deal well with situations of uncertainty, instability, uniqueness and value conflict (p. 50)." (p. 4)

Still another perspective on reflection is posed by Boud et al., (1985) wherein reflection is defined as "an active process of exploration and discovery which often leads to very unexpected outcomes" (p. 7). The notion of reflectivity includes a process which assumes that: "only learners themselves can learn and only they can reflect on their own experiences; it is not idle meanderings or daydreaming, but purpose of activity directed towards a goal . . . the process is a complex one in which both feelings and cognition are interrelated and interacted" (p. 11).

These multiple perspectives on reflection lead us to the question of how we might increase our understanding of reflection and how such reflection might be facilitated in an induction program. In Borko's (1986) analysis of clinical teacher education she distinguishes the characteristics essential to an induction curriculum, all of which appear to us as supportive of a reflective posture. These characteristics are as follows:

> Specifically, the curriculum of assistance must be based on a beginning teacher's needs and interests as they arise during the induction year (developmental, ongoing), and must be appropriate to his or her professional situation (context-responsive). The beginning teacher must take an active role in identifying and selecting the issues to address and the time to address them (participatory and collaborative). In addition, the content of the assistance program must be knowledge-based. Finally, the curriculum (both content and process) must be designed to encourage the beginning teacher to be analytic and reflective about his or her teaching. (p. 58)

Borko draws on a list of principles and conditions which should enable this reflective or inquiring posture and could be integrated into a clinical supervision model appropriate for an induction program:

1. a focus on the teacher's own goals;

2. the use of classroom data as a basis for analysis and discussion;

3. an "inquiry" or "problem solving approach" including hypothesis generation and testing;

4. a commitment to a long-term program of growth and development with a focus on teacher strengths;

5. an atmosphere of mutual respect and trust; and

6. awareness of the ultimate goal of improvement of student learning (Cook, 1986, p. 3).

Still others have proposed alternative models for the infusion of reflective approaches to teaching and learning which might be appropriate for induction programs. One is offered by Korthagen (1985) and is utilized in teacher education programs in the Netherlands. Accordingly, if teacher education involves reflection, "five phases can be distinguished: a) action, b) looking back on the action, c) awareness of essential aspects, d) creating alternative methods of action, and e) trial." The ultimate goal of this reflection program is to help the prospective teacher learn to go through the steps of the model without the help of a teacher educator. The focus on teacher's self sufficiency and reflectivity is also apparent in an induction training program proposed by Fox and Singletary (1986) wherein the goals of the induction program support new teachers in developing appropriate coping strategies and, in the process, the self assessment and evaluative and reflective skills likely to result in continued long-term success as a teacher. Accordingly, to approximate this larger goal, four subgoals are identified that should define, according to Fox and Singletary, effective induction programs:

1. to develop a psychological support system for the teacher, focusing on self perception and attitudes likely to result in increasing commitment and retention;

2. to assist in the development of acceptable methods of solving problems that typically confront new teachers, especially methods of classroom management and discipline;

3. to help develop the skills necessary to transfer the pedagogic theories received in preservice courses into appropriate teaching practices;

4. to provide experiences in which new teachers can begin to develop professional attitudes in the analytical and evaluative skills necessary to maintain a high level of proficiency in a continually changing profession. (p. 13)

A final model for reflectivity involves the use of personal and professional journals or logs as a vehicle for extending reflectivity. Particularly, Mary Louise Holly (1984) proposes a process for logs, diaries, and journals wherein reflectivity could be facilitated.

> A journal is not merely a flow of impressions, it is impressions plus descriptions of circumstances, others, the self, motives, thoughts and feelings. Taken further, it can be used as a tool for analysis and introspection. It is a chronicle of events as they happen, a dialogue with the facts (objective and interpretations) subjective, and perhaps most important it is an awareness of the difference between fact and interpretations. A journal becomes a dialogue with oneself, over time. To review journal entries is to return to events and their interpretation with the perspective of time. Over time, patterns and relationships emerge that were previously isolated events "just lived." Time provides perspective and momentum, and enables deeper levels of insight to take place. (p. 4)

In her presentation of the use of logs and journals for reflectivity Holly describes the cyclical pattern of reflection as: "first, reflecting on experiences before or as you write; and then, reflecting on the journal entries themselves at some later stage, which may provide material for further reflection in writing, and so on" (p. 7). Holly's perspective on journal writing and its relationship to reflectivity supports the problem solving or puzzling perspective presented in Schon's notion of reflective practitioners. She posits that journals allow writers to present a flow of events and then to go back and reconstruct or recapture the thoughts and feelings and setting of the event. She further notes, "once these flows are felt, other events, behaviors, or ideas that 'fit with them' will become increasingly evident. The journal holds experiences as a puzzle frame holds its integral pieces. The writer begins to recognize the pieces that fit together and, like a detective, sees the picture evolve. Clues lead to new clues, partial perspectives to holistic perspectives." (pp. 7-8)

These multiple perspectives on reflectivity are consonant as well with the utilization of collaborative action research as another vehicle for infusing an inquiry perspective into induction programs.

Using collaborative action research in induction programs. Closely associated and often used interchangeably are the notions of reflectivity and the process of collaborative action research. Schon's work on reflective practitioners uses interrelatedly the notion of reflection in action and the process of experimentation in the classroom. Accordingly, collaborative action research, first referred to in the 1940s and 50s (Lewin, 1948; Lippitt, 1949) is a process which emphasizes and encourages the cooperative study of problems by practitioners and researchers. In 1976, Ward and Tikunoff proposed a research development strategy which they called interactive research and development teaching (IR&DT). Accordingly:

> IR&DT places teachers, researchers, and trainer-developers together to inquire as *a team*, beginning with the initiation of the R & D process, into those questions, problems and concerns of *classroom teachers*. An IR&DT team is charged with conducting research and *concurrently* developing training based on *both* the research findings and the research *methods* and *procedures* employed in their study. Decisions are made *collaboratively*. For IR&DT, this means that each member of the team has *parity* and shares *equal responsibility* for the team's decisions and actions from identification of a question/problem through completion of all resultant R & D activities. (p. 4)

This model was implemented at a number of school districts and the following results were reported: 1) when the system is implemented with high congruence of the essential features of the model it impacts on the rigor and usefulness of R & D outcomes; 2) it is more effective when it is designed to fit the needs and the context of the participating people and institutions; and 3) it can reduce the timelag typically needed for research findings to be utilized by practitioners.

More recently, an approach to collaborative action research has been manifested by Kemmis and McTaggart (1982) called *The Action Research Planner.* This process of collaborative action research includes a four stage process of planning, acting, observing and reflecting. This is a cyclical and repeatable process of reflectivity and action research in the classroom. Distinctions made about this mode of collaborative action research are best made by what action research is not:

> It is not the usual thing teachers do when they think about their teaching. Action research is systematic and involves collecting evidence on which to base rigorous reflection. It is *not* problem solving. Action research involves problem-posing, not just problem solving. . . It is not research on other people. Action research is research by particular people on their own work, to help them improve what they do, including how they work with and for others. . . It is not "the scientific method" applied to teaching. . . . action research is not just about hypothesis testing or about using data to come to conclusions. (McTaggart et al., 1986, p. 67)

Rather, action research focuses on the concerns of the researcher (teacher) as the subject and is a lived process of changing both the teacher and the situation in which the teacher acts. The primary purpose of action research from this perspective is in improving education by changing it, making research similar to the collaboration described in IR&DT, establishing self critical communities and helping teachers become inquisitive by using compelling evidence from records and personal journals in the critical analysis of events that occur in classrooms.

In both the IR&DT and the Kemmis and McTaggart models of collaborative action research and in other adaptations of collaborative action research which we have reviewed, the primary perspective is to empower teachers to look critically at classroom activity, to utilize knowledge of other research and research methodologies in a practical manner toward the improvement of classroom practices, and to reduce the linear and fragmented nature of the conduct of research and development particularly with regard to university-school research endeavors. Oja's (1984) findings, derived from her two-year research project using collaborative action research to change school practice, suggest ways in which the university researcher can contribute to school-based collaborative action research teams. "University researchers bring unique perspectives and skills to help a collaborative research team identify its research focus and achieve its goals in the research task, research process, and group process" (p. 5). She cautions, however, that university researchers who wish to operate within collaborative action research models must have requisite skills in group process strategies to deal effectively with inviting teachers to engage in group research activities, clarifying questions, focusing on group tasks and setting the boundaries of the studies pursued. This would be particularly true in encouraging beginning teachers to engage in the action research activities. Secondly, university researchers need the requisite methodological skills in both quantitative and qualitative analysis and third, university researchers need to subscribe to "the philosphy of collaborative action research so that the characteristics which define such research are congruent with the researcher's values" (p. 6).

A corollary to the collaborative action research arena is the Educational Research and Dissemination Program (ER & D) funded on a two-year grant from the NIE to the American Federation of Teachers. This program, while not specifically a collaborative action research model, does offer an approach to the translation of research for practicing professionals. The

design of this program is that selected research is translated into terms understandable to practitioners. In this scheme, local site coordinators at selected school districts and teacher-research linkers (TRLs), selected classroom teachers, are involved in a training program to prepare them to translate research findings into practical language usable by the teachers in their daily classroom activities. A staged training format has been developed wherein TRLs adapt research findings and present the translation of these findings to other teachers as a result of discussions while with participants in training sessions. Ultimately, teachers in their discussions of research findings begin to think about practices and strategies that could be derived from these strategies and effectively utilized in the classroom. Wenz (1985) comments that this program bridges the gap between the research-producing universities and research and practice orientations of the classroom teacher. She notes, "Teaching has traditionally been thought of as an art, not a science. Art has never precluded science, as exemplified by DaVinci. An artist needs knowledge of color, texture, light and composition. The blend of science and art is the hallmark of the best and most creative in any field of endeavor, including education" (p. 78). Wenz' summary statement makes nicely the point that the relationship of reflectivity and action research to the notion of inquiry in professionals is embedded in a respect for posing, puzzling, and reflection in action; activities which can be fostered through university involvement in the conduct of induction programs. Specifically, we will propose in the following section a model which integrates reflectivity and knowledge of research, along with the processes of instructional observation and supervision to provide a model for the effective induction of beginning teachers.

Developing an Instructional Supervision Model for Facilitating Induction Programs

Our interest in fostering the development of inquiring professionals through the process of reflectivity and collaborative action research makes necessary the evolution of induction programs that are multi-dimensional and interactive. It is important that there is access to the translation of empirically supported knowledge about teaching, and the opportunity for mentors and beginning teachers alike to observe each other's teaching and offer feedback about teaching, and there is need to assist both mentors and inductees in understanding the supervisory process involved in utilizing this knowledge and observational data to improve classroom instruction. As a centerpiece of activity in an induction program, we propose an instructional supervision model for inquiring professionals based on considerations of three knowledge bases: Knowledge of classroom practices, knowledge about classroom observation, and knowledge of variations in instructional supervision processes. This conceptualization sustains the notion of creating inquiring professionals and can be envisioned as three overlapping knowledge bases intersecting to formulate the implementation of an instructional supervision process. At this point we briefly explicate these three knowledge bases required in this design:

Classroom processes. The primary reference point for knowledge on classroom processes is provided in the *Third Handbook of Research on Teaching* (Wittrock, 1986) and particularly in the introductory chapter by Schulman, wherein four dominant lines of inquiry into teaching are identified as process/product research, research on academic learning time, research on mediation of learning, and research on the ecology of the classroom. We will address these briefly to add focus to our instructional supervision model. It is our assumption that any intervention or extension of professional preparation for beginning teachers and the related activities of mentor teachers must emanate from knowledge of the research on teaching and schooling in order to focus observation procedures and maximize collaborative action research approaches to classroom improvement. This approach will necessitate the kind of translators proposed in the AFT teacher research linker model, and the kind of prerequisite skills and attitudes described by Oja as necessary for university collaborators who participate in induction programs designed to support this model.

Classroom observation. This primary goal derived from our interest in classroom observations is to allow teacher mentors and inductees to become acquainted with an overview of classroom observation processes, including ways of making meaning out of classroom life and practices. From this analysis, teacher mentors and inductees would be able to create observation procedures and apply these techniques in real classroom situations. The primary knowledge base is derived from the chapter by Evertson and Green (1986) in the *Third Handbook on Teaching*, entitled "Observation and Inquiry Method." The purpose of this chapter was "to explore the nature of observation as a research approach, and to provide a framework for making informed decisions about design and implementation of observation and research, to explore the nature of observational inquiry and methods related to this inquiry process" (Evertson and Green, 1986, p. 163).

In this instructional supervision model proposed then the focus of our work on observation systems is on the nature of observation and the creation of observation tools, particularly using an action research framework for selecting, designing and implementing observation of educational practices and issues. Various ways of recording and storing observations can be examined so that teachers may develop a repertoire of strategies for collecting and analyzing data on aspects of life in their classrooms. Mentor and inductee teachers would be exposed to various systems, including the utilization of category systems, descriptive systems, narrative systems and technological references. Each of these ways of recording could be presented and described to participating mentors and inductees, and then the opportunities for practice and feedback could be provided.

Instructional supervision. Our interest in instructional supervision is for the purpose of allowing participating teacher mentors and inductees to review supervision practices from the perspective of the purposes these approaches are intended to serve. From an array of supervisory practices, participants could utilize modified clinical models to design individual approaches to supervision, incorporating knowledge of classroom observation processes to inform the supervisory approach. The knowledge base for instructional supervision is derived from multiple models including those proposed by Cogan (1973), Goldhammer (1969), Glickman (1981), Gitlin (1981), Garman (1984) and Kemmis and McTaggart (1982). These multiple supervision models reflect different orientations and purposes but generally include the following six stages: problem analysis, instrument design, classroom observation, analysis, feedback, and recycling. In this instructional supervision design, the teacher mentor and inductee decide together the focus of their classroom observation and develop various recording systems wherein the activities observed and the symbols used are the creation of the mentor and inductee. The emphasis is on utilizing observation systems in the instructional supervision processes in order to provide new teachers and teacher mentors with a fuller understanding of the subtleties and complexities of classroom interaction and activity.

In review, this design begins by offering participants (mentors and inductees) an overview of various knowledge sources about teaching, including ways of making meaning out of classroom life and practices. From later analyses, they create observation procedures and apply them in classroom settings. Finally, they engage in a review of supervisory practices primarily from the perspective of the different purposes these approaches are intended to serve and utilize a modified clinical approach to enable their ongoing dialogue and study together.

Participants in an induction program using this model will gradually be exposed to and engaged in the translation of extant knowledge for use in focusing observation and in employing supervisory strategies to improve instruction in the classroom. For instance, an aspect of classroom management as evolved from recent research could be used as a focus for designing the nature of the observation system required and the approach to supervision employed. The supervisory approach would also be tempered by the nature of the role relationship between the

mentor and inductee. Further, it would be the intention of the induction program over time to move through various knowledge bases, assuming that this program is a long-term multiple-year activity.

The major intended purpose of the program is to assist mentors and inductees in acquiring observation and supervisory practices both appropriate to the mentoring role and helpful to solving the problems of beginning teachers as they work together in classrooms; inductees would also engage in reflective activities which would require them to record the experience of engaging in this instructional supervision model. Observations could be recorded through logs, diaries and journals, critical event summaries, self-taped interviews, and other forms of qualitative reporting. Embedded in the various phases of the supervisory process would be collaborative action research.

A cyclical approach undergirds this design. In each new cycle of information presented regarding the three knowledge bases of classroom processes, instructional observation, and instructional supervision, inductees and mentors would become familiar with *knowledge about* various topics presented, *engage in* activities and clinical simulations which allow for understanding of the topics presented and, finally, *construct* actual/usable observation systems and supervision procedures appropriate to the topics presented (knowledge/process integration and application). In summary, this model allows us knowledge about. . .engagement in. . . and knowledge construction with ways of learning about this knowledge stressed. The eventual culminating activity of the instructional supervision model would be the creation between mentor and inductee pairs of an instructional supervision model tailored to their particular needs, roles, and responsibilities.

The creation of this model constitutes a serious attempt to integrate conceptions of teaching that are reflective and inquiry-based and also to move away from the topical and often fragmented nature of activities provided for beginning teachers in the context of induction programs. It has as its major attribute the utilization of extant knowledge bases, the integration of the mentor and inductee activities focused around the same set of understandings, the engagement of both mentors and inductees in evolving instructional observation and supervision practices to suit their individual needs and interests, the catalyst of the university in providing knowledge information and translation into practice, and, finally, the creation of a system that could be cyclical and recurring over a long-term induction program. We conclude this paper by proposing a series of theoretical referents for studying the induction process which would allow us to describe more richly than is available in the literature today the nature and impact of induction programs.

Proposing Theoretical References for Studying Induction

Our purpose in this section of the paper is to propose, however briefly, a number of different perspectives from which the induction process and programming for beginning teachers could be more fully described and explicated through studying induction practices. As Veenman (1984) reports, studies of induction have focused largely on the problems of beginning teachers and have manifested themselves in survey instruments and interview approaches to documenting these problems. Our proposal is that the study of induction year processes should be more multidimensional, should probe the particular theoretical assumptions of the programs as derived and could focus on frameworks for which we have an initial understanding but need more consideration. As noted earlier, Veenman proposed three promising theoretical perspectives from which to view the study of induction processes. To reiterate, he explicates a personal development framework, a cognitive development framework, and a developmental socialization framework. We wish to explicate these three and several other theoretical perspectives from which induction could be studied.

Teacher Development

The frameworks of personal development concerns and cognitive development theories are presented by Veenman (1984) as ways to explain changes in individuals and the mechanisms by which these changes occur, reflected in the personal development theories of Fuller and Bown (1974) and in the adult development framework studies by Sprinthall and Theis-Sprinthall (1983). Other researchers have been particularly interested in developmental concerns, particularly Feiman and Floden (1980), Floden and Feiman (1981), Oja (1981), to name but a few. Rodgers' (1980) classification of theories underlying student development with reference to college age students is another way to think more systematically about studying the developmental stages of teachers, including cognitive development theories explicated by Kohlberg (1969) for understanding moral and ethical development; Loevinger's (1966, 1976) study of ego development; Perry's (1970) cognitive development scheme of positions of intellectual development; and Harvey, Hunt, and Schroeder (1961) and Hunt (1966) on integrated complexity or degrees of abstractness. According to Rodgers "these theories contribute specificity and concreteness to our knowledgement of development in the adult years" (p. 53), and could be useful as well in the study of teaching.

Teacher Socialization Frameworks

This area reflects the major inquiries of an array of scholars interested in teacher socialization including Lacey (1977), Johnston and Ryan (1980), Tabachnick et al., (1983), Gehrke (1976, 1981), Zeichner and Tabachnick (1983), and Lortie (1975). The critical questions which need continuing attention include changes in the context of institutional settings and the use of social strategies to explain the conditions under which beginning teachers assume their professional role.

Collegiality and Collaboration

This area of study suggests that there are some assumptions made about collegiality that could be tested in the context of induction programs. We make assumptions about the necessity and usefulness of the mentor relationship and advise the formalization of this practice. Questions arise, however, as to whether or not the formal mentoring process is supplanting a more effective or more powerful informal mentoring process and what are the dimensions of the collegiality that is established. Consequently, at the heart of the collegial model is the assumption that by working together, one teacher to another, a teacher's performance can be improved. Such an hypothesis needs to be tested. Little and Bird (1984) describe a pilot study of school level collegial teaming wherein they study the character of successful schools and the collegial relationships therein and the ability of the administrators and teacher leaders to foster these relationships. This stands as an excellent example of the kinds of studies we propose for studying induction programs.

Mutual Adaptation

Bird (1984) reports as follows:

> The Rand Corporation study of federal programs to promote change in the structures of practices of schools concluded that those programs often failed to implement those changes and often failed to institutionalize them, largely because the sponsors ignored or failed to deal adequately with local, political, and organizational circumstances. At best, implementation was mutual adaptation, in which the intended innovation was modified to fit the local circumstances. And the local circumstances were modified to fit the innovation, so that this solution could survive and work. (p. 169)

It is our contention that, as we begin to understand and explicate various models of induction and attempt to disseminate those and share those models nationally, the notion of mutual adaptation will be foremost in considering the adoption of those plans in diverse settings. The adaptability of findings from certain studies to the unique contexts in which teachers exercise their day-to-day and ordinary decision making is critical. We propose that the notion of change through mutual adaptation is essential to effective staff development, particularly in the evolution of the induction years.

Skill Transfer

The skills that teachers learn range from simple to complex and demonstrate an ability to learn and implement classroom management systems such as Evertson et al., (1978) and Stallings et al., (1978) and suggest that teachers are capable of acquiring individual skills and complex teaching strategies. Joyce and Showers (1981) have conceptualized stages in learning that occur as teachers are engaged in skill acquisition and strategies for incorporating these strategies into classroom practices. Joyce and Showers label these stages as horizontal and vertical transfer to reflect on the nature of understanding of skill acquisition and the likelihood of observing those skills in actual classroom practice. Consequently, we take from these studies of skill transfer the necessity of measuring the impact and efficacy of induction programs by virtue of the degree of adaptability and transfer that can be assumed as a result of induction programs.

These are but a few of the theoretical perspectives which can be brought to bear in studying the effectiveness of induction year programs. It is of course the case that early studies of induction programs will most likely be largely descriptive in nature and, as such, can explicate how multiple schemes are evolving and manifesting themselves in practice. It is certainly the role of the teacher educators to keep foremost in the minds of university and school developers of induction programs the critical questions that need to be posed and answered as we develop reasonable and meaningful programs for the beginning years of teaching.

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LEARNING THE LANGUAGE OF PRACTICE: IMPLICATIONS FOR BEGINNING YEAR OF TEACHING PROGRAMS[1]

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I will argue in this paper that a major task confronting the beginning teacher is a learning task. This task is one of learning to think and behave in ways appropriate to the demands of teaching--what I will refer to as "learning the language of practice." Further, I will argue that learning this language of practice is not really possible until a beginning teacher actually engages in teaching. In fact, the "language of schooling" these novices have been exposed to and encouraged to use as part of their formal education may be in conflict with the actual demands of practice.

To argue these points, I offer some ideas related to two sets of questions. *First, how might we best describe the knowledge and skill of the experienced practitioner?* What do teachers know about teaching? How do they represent this knowledge to themselves and how do they use it? How does experience contribute to teachers' knowledge? What are other sources of knowledge and skill? Research on teaching and other professions is beginning to address these questions of practical knowledge, and the early work suggests important implications for understanding professional practice and for educating newcomers.

A second set of questions focuses on, *How do teachers learn to teach?* What kinds of changes occur as beginning teachers become more expert? What knowledge is acquired? What skills are developed? What kinds of experiences create the necessary opportunities for learning practical skill? These questions, though fundamental, are also new ground for educational researchers.

The paper is organized into three parts. The following section sets forth a conception of the nature of the language of practice. Next, I describe a study of beginning teachers learning to teach to illustrate some of the issues involved in acquiring a language of practice. The final section proposes ideas for describing the language of practice of teachers.

THE LANGUAGE OF PRACTICE

Language and Thought

One of the most important things psychologists are learning about skilled performance by experienced practitioners is that they are able to effectively draw upon and orchestrate large bodies of knowledge using skills uniquely suitable for the problems at hand (Anderson, 1982; Larkin, 1980). In other words, attaining expertise seems to involve the mastery of a unique set of symbols and operations--mastery of a language of practice.

Bruner has defined intelligence as the degree to which one has internalized the tools provided by a given culture (Bruner, 1971, p.22). This definition highlights the role that mastery of specific forms of knowledge and cognitive operations plays in defining one's "intelligence" or ability. Bruner argues that the most important tool of a culture is language. In this context, it may be useful to think of a profession as a culture, with a specific "language of practice" as one of its

[1]This paper is based on a manuscript in preparation for *Curriculum Inquiry.*

most important tools.

This conception is supported by the ideational theories of culture that describe cultures as systems of knowledge and thought. To quote Ward Goodenough:

> A society's culture consists of whatever it is one has to know or believe in order to operate in a manner acceptable to its members. Culture is not a material phenomenon; it does not consist of things, people, behavior, or emotions. It is rather an organization of these things. It is the form of things that people have in mind, their models for perceiving, relating, and otherwise interpreting them (Goodenough, 1957, p. 167).

> Culture . . . consists of standards for deciding what is . . . for deciding what can be for . . . deciding it, and . . . for deciding how to go about doing it (Goodenough, 1961 quoted in Keesing, 1974, p. 77).

A profession may then be considered a culture with its members sharing perceptions, conceptions, and acceptable actions. Language is an important subsystem of the culture and a means for thinking and interacting. When I use the term "language " I am using the term broadly. It includes the vocabulary and jargon that practitioners use within a profession. It more importantly refers to the modes of thinking and acting employed by practitioners to effectively accomplish the tasks at hand. A spoken language includes syntax, semantics, and pragmatics. Likewise, a language of practice includes a logic or "grammar" for thought and action, a system of meaning, and guidelines for effective practice.

It is important to emphasize that a language of practice is not primarily a verbal matter, but also includes embodied structures of meaning that are a part of orientation, movement, and manipulation. A language of practice is not only a means for speaking about or representing one's practice to oneself. In fact, many practitioners find this difficult to do. Rather, a language of practice is a set of integrated patterns of thought and action. These patterns themselves constitute a kind of syntax and semantics for action. The words and phrases in this language are behavior, activities, and routines. As such, a language of practice is usually found in a practitioner's action rather than in one's speech. It is not heard, but seen and felt. What are the characteristics of a professional language of practice? Research suggests that it has a unique form and structure.

Professional knowledge and skill is oriented toward action, toward practice. It is specialized and context sensitive. In his research on professionals such as architects, planners, and psychotherapists, Donald Schon (1983) describes the working method of the practitioner as reflection-in-action. Here the professional draws upon implicit and situation grounded ("action-present") cognitions in the form of exemplars or "generative metaphors" to understand and think about phenomena. Schon portrays the process as a "reflective conversation" with the problem situation involving reframing the initial problem, inquiry within the imposed frame, and reflection on the "back talk" produced by this inquiry.

Research on teachers' practical knowledge and skill has uncovered similar commonsense characteristics. Bolster (1983) describes teachers' knowledge as particular and context sensitive, validated pragmatically, socially constructed, holistic, flexible, and resistant to change. Elbaz (1983) has provided detailed examples of the situational, social, and personal-experiential orientations of teachers' practical knowledge. She illustrates how practical knowledge is "a contextually relative exercise of capacities for imaginatively ordering our experience" (Johnson, 1984).

Lampert's (1985) portrayal of the teacher as a "dilemma manager" highlights the value orientation of teachers. She describes teachers as seeking to come to terms with conflicting and often contradictory interests and the necessity that they cope with or manage these problems as a means to "building a working identity that is constructively ambiguous" (p. 190). Lampert's view of the teacher supports Olson's (1977b) assertion that because practical knowledge is acquired in heterogeneous situations and is retrieved only if it is relevant to a particular situation, professional knowledge may not be entirely consistent. This view also suggests that professionals understand this conflict and work to manage it.

These studies describe the knowedge of professionals as socially structured. Like commonsense knowledge, professional knowledge relies on large scale knowledge components in the form of example, illustration, and proverb (see for instance, Schon, 1983 and Elbaz, 1983). Others have argued that these kinds of knowledge frameworks are common yet powerful means for representing thought and action in all walks of life (Lackoff and Johnson, 1980).

Learning the Language of Practice

One implication of this description of the "language of practice" is that professional education emphasizing technical knowledge and skill may leave students poorly prepared to effectively think about and execute practice. In effect, reliance upon textbook knowledge, "scientific" theory, and technical methods as the means of education may leave practitioners unequipped, or to use Bruner's definition, unintelligent. The problem may be at its root a problem of language.

Written language is the "language of schooling" (Olson, 1980). Reading and memorizing texts and producing text-like products dominate school activity. This dominance creates two important effects on the nature of schooling, including professional education. First, the linguistic form of expository written texts places an emphasis on the definition of terms and on formal meanings rather than on typically encountered instances (Olson, 1980, p. 79). In other words, texts promote abstract definitions and meanings at the expense of providing particular instances. (Of course, texts provide examples, but the emphasis is usually upon the exemplification of the general rule, rather than the exception.) As a result of classroom experience the novice teacher may become knowledgeable of the general case, the theory, or the rule, but be unaware of how these ideas get worked out in practice.

A second effect caused by the dominance of texts in formal schooling is how students relate to the information that written language provides. Because of the split between the speaker and his or her words and because of the emphasis on the logical function in texts, readers often see text as an authoritative, objective description of reality above questioning. Olson (1980) has compared this to the way ritualized speech is regarded in traditional religions. "When a child reads a text or when a teacher teaches what a text says, the language appears to originate in a transcendental source just as does the ritual speech——it is not ordinary speech and it is therefore above criticism" (p. 80). Novice teachers may also approach information provided in teacher education programs in this same manner. They may be uncritical of what they have been taught and not realize until they begin teaching that there is a mismatch between the forms of knowledge they have acquired and the demands of practice.

The difficulty faced by beginning teachers in learning the language of practice is further complicated by a need to learn subject matter knowledge that will become the content of their instruction. This content is coded and understood in the language of theory and abstraction. The means for conveying this content must be coded in the language of concrete action and practice. Teachers must learn to juggle these disparate ways of thinking and acting, a task Broudy (1977) has aptly referred to as uniting "the particularity of pupils with the universality of knowledge" (p. 3).

It seems ironic to propose relearning a non-school mode of thinking to school teachers. Yet there are convincing arguments suggesting that "the general theories of science and philosophy that are tied to the formal uses of text provide a poor fit to daily, ordinary, practical, and personally significant experience" (Olson, 1977a, p. 278). Practical reasoning (Gauthier, 1963), with its roots in oral language, commonsense thinking, and moral judgment may be a much more appropriate means for representing and carrying out practical action in the context of a profession.

How then is the language of practice learned if it cannot be learned from textbooks in formal school settings? The description in the following section suggests it may be learned by doing——by becoming involved in the rich and uniquely complex context of real practice. This is not to say that experience does not have its pitfalls (Feimen-Nemser and Buchmann, 1985). Rather, I will argue that actual practice is a powerful learning context because it puts the learner in contact with an array of knowledge and information not available second-hand.

A STUDY OF LEARNING TO TEACH

A study of student teachers in their final year of preservice training (Yinger and Hill, 1982) illustrates some of the processes discussed in the previous section. Our initial research focus was the acquisition of cognitive skill in planning. As the work progressed we became interested in what and how novice teachers were learning. Consequently, we redirected our efforts toward locating and describing opportunities for learning in practicum settings, with the eventual purpose of generating some useful hypotheses about how teachers learn to teach. Examining learning in these contexts locates this study at the intersection of three bodies of active research and theorizing: research on student teaching, research on the acquisition of cognitive skill, and research on learning in non-school contexts.

Research on Student Teaching

Teacher educators have recently described the experiences of students in field-based learning settings, especially student teaching, using observation and interview methods (e.g., Tabachnick, 1980; Tabachnick, Popkewitz, and Zeichner, 1979-1980; Tabachnick, Zeichner, Densmore, Adler, and Egan, 1982; Zeichner and Grant, 1981). These studies portray the student's experience as one of negotiating a complex set of institutional, occupational, and social structures while trying to integrate one's beliefs and orientations with accepted knowledge and procedures. All of this takes place in the context of dealing with two separated institutions, the university and the school——an enculturation process that has been described as not "rational, gradual, or even developmental," but rather "divergent, abrupt, and unpredictable" (Fox, 1977, p. 29).

Much of the research in teacher education has focused on identifying the influences in the student teaching experience. Answers vary, but the discussion has focused on either the structure and procedures of the training institutions or the background and personality of the students as primary contributing factors. A number of researchers have portrayed the influence as an interaction of the two factors (e.g., Lacey, 1977; Zeichner and Grant, 1981).

Our research has been less concerned with the socialization aspects of these kinds of field experiences and more interested in understanding from a psychological perspective the tasks students confront and the processes that lead to successful learning. As a means to this understanding we have relied on research from cognitive psychology and anthropology.

Research on the Acquisition of Cognitive Skill

Experts and Novices

Cognitive psychology initially focused its research on describing and modeling cognitive structures and processes in restricted or well-defined situations. More recently, researchers have ventured into more complex and ill-defined task environments like reading, writing, and solving science or math problems, which are of more interest to educators. A research technique that has been used to examine these problems compares the performance of individuals who are less experienced with the problem area, with the performance of more experienced individuals. This comparison of novice and expert performance has led to fruitful theorizing about the kinds of changes that occur as a result of experience. In the process of this research (often referred to as research on the novice/expert shift), cognitive researchers have become interested in the acquisition of cognitive skill, or more simply put, in learning.

What is it that makes someone an expert? What kinds of things separate the more experienced person from the less experienced? At the risk of oversimplifying the research findings, expert performance might be described in the following manner:

1. Experts are more likely than novices to recognize (perceive and understand) and represent problems using large-scale functional units (e.g., schemas, scripts, routines) that focus on the crucial underlying structure and components of the problem (de Groot, 1966; Hinsley, Hayes, and Simon, 1977; Larkin, 1980).

2. Experts are more likely than novices to employ skills of search, evaluation, generation of alternatives, etc. in the form of condition-action pairs (referred to as production systems) that are compiled into sophisticated working methods and procedures (Anderson, 1982; Chase and Simon, 1973; Hayes-Roth, Klair, and Mostow, 1981).

3. Experts are more likely than novices to incorporate global and often qualitative reasoning to plan complex actions and procedures at a low level of detail before working out a problem in all its detail and complexity (Greeno, 1976; Larkin, 1979, 1980).

4. Experts are more likely than novices to mentally simulate action prior to its execution by means of incorporating complex and detailed representations of action within a particular environment (de Groot, 1965; Jeffries, 1982; Larkin, 1979).

Learning

If we assume this summary incorporates some important differences between novices and experts, how did the experts acquire these skills? In other words, what might be the kinds of changes that take place when learning? Langley and Simon (1981) summarize some of the state-of-the-art conceptions by stating that learning may involve modification of any component of the information processing system: 1) additions to or reorganization of the knowledge base; 2) augmentation of the recognition system, or index, for the knowledge base; 3) augmentation of search strategies; 4) modification of evaluation functions stored in memory and used to guide search; 5) apparent augmentation of short-term memory; 6) augmentation of lexical, syntactic, and semantic knowledge in language processing systems, or 7) enrichment of the representations of information (ways of organizing information) in memory.

What conditions might be critical to the facilitation of these changes? Drawing on these conceptions and others (e.g., Simon, 1980) one might expect learning to take place to the degree to which the following conditions are present: 1) the learner has access to needed information, and 2) the learner has an opportunity to practice.

Access to Information

Learning is commonly portrayed as a problem solving process relying upon hypothesis testing as a primary mechanism. As such, the success of learning depends upon having access to the right kinds of information at the right times. At least three kinds of information are needed for learning. First, the learner needs examples of appropriate and effective action, whether it be the steps involved in working out an algebra problem or a method that a teacher can use for handling a classroom disruption. This information becomes part of the learner's knowledge base, or repertoire of action, to be drawn upon as needed.

Second, the learner needs to have opportunities to collect information about when a certain action is appropriate. This depends upon opportunities to associate a specific action with a specific situation or condition. To accomplish this pairing, a learner needs access to specific situational cues (related to a condition or task) that signal the appropriateness of an action. Also, the learner needs access to the components or series of actions leading to the final performance. Building on the examples above, one must learn under what conditions it is appropriate to subtract a constant from both sides of an equation or under what conditions it is appropriate to ask a student to leave the classroom.

The third kind of knowledge that a learner might need is called knowledge of results. Learning depends on knowledge about the success or failure of a specific hypothesis or action. A system cannot successfully modify itself without some kind of feedback on the improvement or degradation of performance. Does a specific method lead to the desired state of affairs? Is the equation simplified or did the disciplinary measure work?

Opportunity to Practice

Experienced teachers and learners know that an effective way to learn something is to take what is new (knowledge, skill, etc.) and make it one's own by using it, playing with it, or otherwise manipulating it in various situations. As stated above, skill depends not only on having a set of actions or methods at one's disposal but also on knowing when it is appropriate to act in a certain way. Learning how to do a complex activity requires learning how to coordinate and orchestrate a number of different methods and procedures.

Cognitive researchers have highlighted two results of practice. The first, automaticity, refers to the process of combining, or chunking, knowledge into increasingly larger functional units that require less attention to activate and draw upon than did trying to keep track of all the individual components. Automaticity reduces the strain on short term, or working, memory and increases the ability to do more things simultaneously.

A second result of practice is the compiling and refining of procedures and working methods. Anderson (1982) has developed a model of skill learning that describes how skills are employed as a function of experience. He states that when skills are first learned, performance is based on the person drawing on and implementing procedures in a piecemeal and one-at-a-time manner. As skill improves, the learner begins to combine methods and to fine-tune aspects of performance until they are no longer used individually but employed in larger, smoother functioning procedures. Practice, then, plays an important role in allowing the learner to take new knowledge or information about conditions and actions and then to improve one's facility at using these components by allowing the learner to try to orchestrate them in new situations.

The Anthropology of Learning

Recent research on skilled performance by anthropologists provides a perspective on learning that is sometimes complimentary, but often different from that of psychologists. The interface between the two disciplines has been well described (Romney and D'Andrade, 1964; Laboratory of Comparative Human Cognition, 1978; Wolcott, 1982). The major influence on the present study has been the research on learning and performance in natural (i.e., non-school) settings (Lave 1985; Moore, 1981, 1982; Rogoff and Lave, 1984; Scribner, 1984). This work has highlighted the degree to which action is shaped by and molded to specific contexts. As a result, anthropological researchers have focused on discovering and describing the tasks that learners construct (Griffin, Cole, and Newman, n.d.).

The research on learning in apprenticeship settings is particularly related to the concerns of this paper (Lancy, 1980; Lave, 1977a, 1977b, 1982). Lave (1977b) has described apprentice learning as an inductive learning experience involving cycles of observation and practice. Also, the evidence she has gathered supporting the development of problem solving skills as an outcome of the process stands in sharp contrast to traditional criticisms of apprenticeship training in education. For example, as early as 1904 Dewey counseled educators to reject the notion of apprenticeship education in favor of laboratory education (Dewey, 1904). He argued that apprenticeships promoted "routine" behavior that "accepts what has been customary as a full measure of possibility and omits to take into account the connections of the particular things done (Dewey, 1916/1966, p. 146). The work of Lave and her colleagues suggests there is a type of learning and reflection occurring in these settings that promotes flexible and adaptive performance.

This study analyzes the learning experiences of teacher education students in apprenticeship-like situations. The focus is on locating and describing opportunities for learning as a means to better understand how these experiences promote the improvement of practice.

Method

The participants in this research were eight female students in the senior year of the Early Childhood Education Program (kindergarten to grade 3 certification) at a large midwestern university. The students were entering what is called the Professional Year of their training. The Professional Year is a model of preservice elementary teacher education that concentrates the upper-level professional courses into three consecutive quarters near the end of the student's undergraduate education.

Method courses are combined with extended field experiences during the first two quarters, leading up to the student teaching experience in the third quarter. Students are also required to participate in The September Experience, a field practicum in school from the opening day of school until university classes begin at the end of September.

Data were collected during the entire Professional Year in the form of entries in personal journals, interviews, and classroom observations. Daily entries in the students' journals were the major source of data for the research. Log keeping was a normal requirement of the Professional Year experiences, and for the purposes of this study, the participating students were asked to use a journal format that has been useful in previous studies of teacher thinking (Yinger and Clark, 1985).

Copies of journal entries (approximately 150 for each student) were collected by one of the researchers who also acted as the university supervisor for the students. The information in the journals was supplemented by observing and interviewing students approximately once every two

weeks. For the purpose of this study, the journals were treated and analyzed as personal documents (Allport, 1942; Yinger and Clark, 1985). Information collected in the observations and interviews were used to supplement the students' comments and to provide an elaborated view of the learning setting and the students' behavior within it.

Findings

The journals yielded a variety of information about the student teachers' thoughts about the classrooms they were participating in--the children, the curriculum, the resources, the "cooperating teacher" and so on. Students also recorded thoughts about learning to become a teacher, learning to survive within the institutional and social context of the school, learning how to coordinate and juggle the demands from university classes, interactions with the supervisor, and personal conflicts and resolutions.

The content of the journals was used as clues to what the student teachers were thinking about and learning. As mentioned above, the four field practicum experiences differed in grade level, duration, frequency in the setting, and amount of accompanying university course work. However, across the different experiences two patterns of thinking and learning occurred regularly in the student participants as they seemed to take on two different perspectives in relation to the classrooms.

Outsiders and Insiders

At the beginning of September Experience, the students' journal entries suggested excitement about the prospects of the field experience. Students mentioned they were spending most of their time trying to learn the children's names, figure out the teacher's management system, learn the curriculum, and locate the available resources. The students' comments were those of an "outsider" to the setting trying to bring meaning to what was being observed.

As time progressed, attention continued to be directed at what the teacher was doing with the children; activities were mentioned by name (for example, "boardwork," "reading," "workbooks"), though rarely more thoroughly described. Comments of a critical or evaluative nature began to emerge. Students would describe an incident they observed and then suggest "what I would have done" or "what I will do when I have my own classroom." Students noted their boredom due to the lack of opportunity for them to become involved in the classroom or their disappointment about the "mundane" tasks teachers gave them to do.

In the students' journals for September Experience, only two kinds of opportunities were mentioned that allowed them to go beyond this "outside observer" role. The first, a conscious effort by each student to become more deeply involved with individual children in the class, took the form of focused observations and periods of individual interaction. The second opportunity, which did not occur for every student, was the teacher's request for the student to be responsible for a reading, math, or other small group activity.

In these latter instances, the student teachers' journal entries abruptly changed. Cursory references to observed activities and the "what I would do instead" comments almost disappeared. In their place were detailed plans for activities or lessons. The tone shifted to "what I will do" and often to "what should I do?" There seemed to be a shift from thinking as outside observer to thinking as inside participant. However, for most of September Experience students only rarely made this shift, and then only toward the end of the experience.

Similar patterns were repeated during the fall quarter. In late September, the student teachers had to join already functioning classrooms, and their initial journal entries reflected the

same "outsider framework." Students talked mainly about activities and materials but rarely, if ever, about rationales for materials or activities, goals for children, or considered alternatives. The outsider framework continued to be reflected in the critical, evaluative comments. They seemed unconcerned about asking questions about why things were being done as they were.

During the quarter, opportunities arose for students to become more integrally involved in the classroom. These limited opportunities most frequently involved the development of instructional materials (to meet university requirements) or work with individual children on skills the student and the cooperating teacher agreed needed extra attention. This latter type of involvement was usually initiated by the student.

Not until the end of the fall quarter was there any noticeable change in the students' perspective. This occurred when students had the opportunity to take on more responsibility in the classroom. The last week of the quarter was designated "Head Teacher Week," and student teachers were to take on the role of head teacher in the classroom. Prior to this week, the journals began to shift, to reflect more of an insider framework. Plans, goals, detailed activity descriptions, procedure lists, and questions surfaced again but on a larger scale than before. Students were to be responsible for the whole classroom, not individual children or isolated activities. Not until this point were we able to find enough examples of learning to begin characterizing the differences in the learning process between the insider and outsider frameworks. Similar patterns were found to characterize the students' experiences during winter quarter and especially during student teaching in the spring.

Doing and Watching

As an insider, learning was best characterized as "learning by doing" (Anzai and Simon, 1979). Students learned as they tried to apply their knowledge about curricula and methods to specific students in a specific setting. They learned from their mistakes. They formulated plans, implemented them in the form of activity centers or "group time," and then watched what happened. There were numerous entries in the journals recording their observations about what went wrong and how they might change it next time. Talk was about "what I do" and "what works."

Learning by doing often took the form of cycling between acting and observing.. A student might plan, implement, observe, and then change the plan or the action for next time. Occasionally the student would consult her supervisor or observe the cooperating teacher to see how she accomplished the same task.

If the insider framework is characterized by learning by doing, the outsider framework is characterized by learning by watching. This watching as an outsider, however, was different from the watching student teachers did as insiders. Insider observation might be labeled "looking with a purpose"——observing to find out "how I did," "what the children did," or "how she (the cooperating teacher) does it." Insider observation is directed toward answering a particular question of practice.

In contrast, observation students did, as outsiders, were less implementation-oriented, and the context was more general and theoretical. Students were learning about teaching in general by watching how another teacher acts. Sometimes new practice was observed, and students noted the techniques——a process not unlike the "collecting" of information that is a part of all learning. At other times, students recorded criticisms of what they were seeing. Here students were "comparing notes," deciding what they would do if they were in the same situation. Outsider observation allows the acquisition of information, but is very different from the trying out of one's knowledge and skill in a practical setting.

The Benefits of Learning by Doing

When teachers are asked to identify the most beneficial component of their professional education, student teaching is usually first. Similarly, when doctors, lawyers, engineers, or other professionals are asked the same question, they nominate their internships, practicums, professional co-ops, or other "on-the-job" experiences. Evidently, these learning experiences are highly valued because learning takes place that is useful when one enters the profession. Why does "useful" learning take place? Our work suggests that in this experience novices have an opportunity to develop in ways that occur only when they have an opportunity to try out their knowledge and skills in actual practice. In other words, "learning by doing" presents unique and crucial learning opportunities.

How does learning by doing influence the development of professional skill and proficiency? The research in cognitive psychology provides a basis for interpreting and better understanding the effects practicum experiences have on participants. Four differences between novice and expert performance were mentioned above. Two important differences related to the findings of this study are 1) experts are more likely than novices to recognize and represent problems using large-scale and holistic units of thought and 2) experts are more likely than novices to incorporate working systems based on the pairing of specific actions with specific conditions of a problem.

Learning to See the Big Picture

Experts see and think about problems differently than novices. Whereas novices often get hung up on the details and idiosyncracies of problems, experts tend to perceive, understand, and think about problems using large-scale functional entities that organize and simplify action in meaningful ways. These large-scale units are variously referred to by researchers as scripts, schemas, and routines. The essential characteristic of each of these notions is that they are ways of representing how experienced people group together complex action and procedures so that they function cognitively as a unit.

An important effect of learning by doing is that it allows one to begin building up these representations of action. This occurs because trying to do something puts one in close contact with all of the intricacies that the task and the environment present. Over time, one gets better at seeing the commonalities and structure underlying various types of action. This is further facilitated because the learner is in a position where he or she has access to essential conditions of learning, namely, access to needed information and an opportunity to practice. As a result, learning by doing offers a wealth of concurrent and coexisting information (often for the first time) that a person can begin organizing as a meaningful whole.

Two such units that are an important part of teachers' thoughts about classrooms are activities and routines (Yinger, 1979; 1980). Research on teacher planning describes teachers focusing on what they and their students will do (activities) rather than on objectives and outcomes. Activities are meaningful wholes because they describe action in a temporal/spatial framework and highlight social and interactional components of instruction. As activities become stable and workable frameworks for learning, they are established as routines. These then guide current instruction and become available as meaningful units of thought for future planning and teaching.

The student teachers in this study made frequent reference to these two entities in their journals. Activities such as reading groups, boardwork, math seatwork, art, and library framed their thinking and planning. They referred repeatedly to efforts to learn routines at the beginning of their practicums and to efforts to establish workable routines as they took on increasing responsibility for the classroom. It was evident that a large portion of the new knowledge they

acquired in the field settings were in terms of new activities and routines for instruction, management, and planning.

Through learning by doing, student teachers gain access to information less apparent to one who is only observing. Specifically, they gain information about underlying considerations and components that are important as one makes day-to-day decisions. Knowledge about what things to consider when planning would be an example of this type.

Planning is difficult to observe because of its cognitive nature. At most, one might see products of planning and hear rationales for them. One would not realize the myriad considerations to be taken into account until having to formulate a plan of one's own. By trying to anticipate future action in the classroom, the complexity of teaching becomes readily apparent. It is probably no coincidence that the students' shift to more of an insider's perspective coincided with increased evidence of planning behavior.

Learning to Do the Right Thing at the Right Time

Traditionally, professional training has emphasized knowledge and technique (method, procedure) under the assumption that competent action is based primarily on the possession of the necessary skills. However, recent research on cognitive skill indicates that competency is not just a sum of the subskills, but rather depends on being able to select and use skills appropriately, that is, at the right time and under the right conditions.

Two things need to happen to allow a learner to determine if his or her behavior is appropriate for the problem or situation at hand (Anzai and Simon, 1979). First, knowledge of results, that is, knowledge about effectiveness, must be available. Second, to correct behavior producing undesirable results, one must be able to reason backwards to preceding behavior that can be interpreted as having caused the outcome. Learning by doing is effective in this case, because to an "insider" actually carrying out the action, knowledge of results is usually more direct and clear. In other words, the actor is likely to be in the best position to process feedback. In addition, the actor is able to reason backward more easily, because preceding pathways of action, especially cognitive action, are personally accessible for evaluation.

As "outside observers" in this study, the student teachers had access to several kinds of information. First, they had access to general patterns of teacher and student behavior, focusing on what was done, and was rarely accompanied by any explanation or rationale by the cooperating teacher.

As "inside participants," the student teachers had access to more and richer information, which enabled several imporant things to happen. First, they had access to more problem-relevant perceptual information. They learned what cues are relevant in a specific situation. They learned what constitutes feedback. They also learned what really constitutes a condition for a certain action. Second, because of the enhanced accessibility of information, the student teachers were able to connect specific conditions with specific action. Also, they had numerous opportunities to revise and fine-tune this knowledge. Third, as a result of practice in the use of various condition-action pairs they were able to begin to compile individual pairings into larger, more smoothly functioning procedures and methods.

An incident that appeared in one student's journal illustrates these processes. Donna was learning how to present the morning boardwork assignment. Her first opportunity to do this was at the end of the first week: "I taught the boardwork this morning. I went through the weather--news--and boardwork. The students were well behaved." The planned schedule for Donna's participation indicated that she took on this responsibility every day during week two. It

was not until week three, however, that it surfaces again in the journal: "I can't get the morning work explained at a good pace." She is concerned enough about this problem to ask her cooperating teacher to demonstrate it for her. Why has pacing now become a concern? One possible explanation is that in week three Donna was now responsible for all of the reading groups, which took up most of the morning time. Earlier, when her participation was limited, it was not evident how one activity running overtime affected the activity that followed. Donna's concern with time was evident in careful notes about beginning and ending times she made while observing the teacher carry out this activity the next day. It can also be seen in a following entry: "My intro to the board work went rapidly." Donna's insider perspective allowed her to see a factor that was invisible before, closely observe the situation and effective actions, and then successfully incorporate them into her own repertoire--a lesson only learned by doing.

DESCRIBING THE LANGUAGE OF PRACTICE

This study provides some clues about how new teachers come to develop a set of meanings and patterns for thought and action--what I am calling a language of practice. We are still far from understanding *what* this language is like and how teachers represent and utilize practical knowledge. There are, however, a growing number of researchers who are beginning to do work in this area (e.g., Clandinin, 1983; Clandinin and Connelly, 1984; Elbaz, 1983).

How can we as researchers and educators come to understand and describe the language of practice? Common sense and practical knowledge is obviously transferable (Goodenough, 1957; Polyani, 1958). We learn to function practically from stories, proverbs, aphorisms, and advice of those wiser. What would become of efforts to codify this knowledge, to write it down? Would the form of written language distort and destroy its character, stripping it of its meaning and vitality? Maybe not. I know of one successful effort to describe a language of this type in another field of practice.

A Pattern Language

Christopher Alexander and his associates in architecture have been working for almost twenty years to understand and propose a language for planning and building. In the companion volumes, *A Pattern Language* (Alexander, Ishikawa, and Silverstein, 1977) and *The Timeless Way of Building* (Alexander, 1979), they describe a language that an individual can use to think about, plan, and construct towns, buildings, public spaces, homes, and gardens. The power and uniqueness of the language is in its form.

The building block of the language is a pattern, which Alexander describes as a "unitary pattern of activity and space, which repeats itself over and over again, in any given place, always appearing each time in a slightly different manifestation" (1979, p. 181). Every place is given its character by certain patterns of events that keep happening there. The quality in places has the same quality found in nature--the repetition of patterns with variation and uniqueness in the way patterns manifest themselves (Stevens, 1974).

In the pattern language, each pattern describes a problem that occurs repeatedly in the environment and then describes the core of the solution to that problem. Whereas natural language uses words and rules of grammar and meaning to create meaningful sentences, a pattern language uses basic patterns and other more complex patterns specifying connections between patterns to produce buildings and places. Each pattern expresses a relationship between a context, a problem, and a solution. Unlike the tendency of a rule to produce restricted solutions, a pattern produces a unique situation every time it is used.

The pattern language embodies a systems perspective. It is a traditional systems perspective with its organic and biological connotations rather than the systems perspectives of industry and technology emphasizing procedure and control. Every pattern is embedded in larger patterns, and smaller patterns are embedded in it. The 253 patterns range in scope from the scale of the community, e.g. "INDEPENDENT REGIONS," "CITY-COUNTRY FINGERS," "AGRICULTURAL VALLEYS," to the scale of completing a building with ornament, light, and color, e.g., "WARM COLORS," "DIFFERENT CHAIRS," "POOLS OF LIGHT," and "THINGS FROM YOUR LIFE".

There are millions of combinations possible from these patterns. In creating a certain space, Alexander et al., advise one to first select a pattern that closest describes the scope of the project, for example, the arrangements of a garden. One is then advised to work up to the more inclusive patterns like "SUNNY PLACE" and "OUTDOOR ROOM" and down to more detailed patterns like "TREE PLACES," "TRELLISED WALK," and "GARDEN SEAT". Though the patterns are arranged sequentially the authors suggest they be used as a network that can produce infinite patterns.

Each of the 253 Patterns is presented in the same format, designed to show its connections to other patterns and "to present the problem and the solution of each pattern in such a way that you can judge it for yourself, and modify it, without losing the essence that is central to it" (Alexander et al., 1977, p. xi). Each pattern begins with a photograph illustrating an "archetypal" example of the pattern. For instance, Pattern 159 is LIGHT ON TWO SIDES OF EVERY ROOM and the pattern begins with a picture of a large dining room with light flooding in from two large windows on one wall and through an open pair of French doors on an adjacent wall. Following the picture is a paragraph setting the context for the pattern by explaining how it helps complete certain larger patterns. For Pattern 159:

> once the building's major rooms are in position, we have to fix its actual shape: and this we do essentially with the position of the edge. The edge has got its rough position already from the overall form of the building--WINGS OF LIGHT (107), POSITIVE OUTDOOR SPACE (106), LONG THIN HOUSE (109), CASCADE OF ROOFS (116). This pattern now completes the work of WINGS OF LIGHT (107), by placing each individual room exactly where it needs to be to get the light. It forms the exact line of the building edge, according to the position of these individual rooms. The next pattern starts to shape the edge.

Following this paragraph there is a "headline" giving the essence of the problem in one or two sentences.

> When they have a choice, people will always gravitate to those rooms which have light on two sides, and leave the rooms which are lit only from one side unused and empty.

Next comes the body of the problem, which is the longest section of the pattern. "It describes the empirical background of the pattern, the evidence for its validity, the range of different ways the pattern can be manifested in a building, and so on" (p. xi).

> This pattern, perhaps more than any other single pattern, determines the success or failure of a room. The arrangement of daylight in a room, and the presence of windows on two sides, is fundamental. If you build a room with light on one side only, you can be almost certain that you are wasting your money. People will stay out of that room if they can possibly avoid it. . . .

Our experiments on this matter have been rather informal and drawn out over several years. We have been aware of the idea for some time--as have many builders. (We have even heard that "light on two sides" was a tenet of the old Beaux Arts design tradition.) In any case, our experiments were simple: over and over again, in one building after another, wherever we happened to find ourselves, we would check to see if the pattern held. Were people in fact avoiding rooms lit only on one side, preferring the two-sided rooms--what did they think about it?

We have gone through this with our friends, in offices, in many homes--and overwhelmingly the two-sided pattern seems significant. People are aware, or half-aware of the pattern--they understand exactly what we mean . . .

The importance of this pattern lies partly in the social atmosphere it creates in the room. Rooms lit on two sides, with natural light, create less glare around people and objects; this lets us see things more intricately; and most important, it allows us to read in detail the minute expressions that flash across peoples faces, the motion of their hands . . . and thereby understand, more clearly, the meaning they are after. *The light on two sides allows people to understand each other . . .*

In a small building, it is easy to give every room light on two sides: one room in each of the four corners of a house does it automatically.

In a slightly larger building, it is necessary to wrinkle the edge, turn corners, to get the same effect. Juxtaposition of large rooms and small, helps too . . .

After this discussion the solution to the problem is stated. This is the heart of the pattern, "which describes the field of physical and social relationships which are required to solve the stated problem, in the stated context" (p. xi). The solution is always given in the form of an instruction--"so that you know exactly what you need to do, to build the pattern."

Locate each room so that it has outdoor space outside it on at least two sides, and then place windows in these outdoor walls so that natural light falls into every room from more than one direction.

To conclude the pattern, there is a diagram that illustrates the pattern, with labels to highlight the main components (see Figure 1). This is followed by a paragraph tying the pattern to smaller patterns in the language needed to fill it out and embellish it.

Don't let this pattern make your plans too wild--otherwise you will destroy the simplicity of POSITIVE OUTDOOR SPACE (106), and you will have a terrible time roofing the building--ROOF LAYOUT (209) . . .

Place the individual windows to look onto something beautiful--WINDOWS OVERLOOKING LIFE (192), NATURAL DOORS AND WINDOWS (221); and make one of the windows in the room a special one, so that a place gathers itself around it--WINDOW PLACE (180). Use DEEP REVEALS (223) and FILTERED LIGHT (238). . . .

Figure 1
(After Alexander et al., 1977, p. 750)

Alexander argues that each person creates a pattern language in his or her mind. This language is constantly growing from experience, both personal and cultural. No two languages are alike, but many patterns are shared. This becomes the basis for communication around the creation of towns, neighborhoods, and shared dwellings.

When one is faced with an act of design, one does not usually think of it or try to solve it from scratch. The problem gives rise to stored patterns, which become the foundation for creative design. The use of a pattern language, then, is organic, responsive, and sensitive to context. Goals and means are intimately connected. Standard processes are adapted to produce unique forms. The use of a pattern language builds upon the existing state of affairs to make it more whole, more unified, more complete. Design becomes a process of differentiation, beginning with the whole and then step by step unfolding the parts.

In this manner, a pattern language becomes a framework, a type of theory, and a means for organizing and representing the world. Alexander et al., argue that today most people do not have a pattern language--a coherent framework for representing or talking about how they think about the world. The language they propose is not designed to be *the* definitive language but a means for people to begin developing language of their own.

A Pattern Language For Teaching

It is the act of design that links the processions (Simon, 1981). Design is the process of bringing desired states into being by developing frameworks that guide future action. An architect creates a space for habitation or interaction by designing physical artifacts (buildings, court yards, rooms, etc.) that define space. A teacher creates a space for interaction, too. This interaction is often of a special type--learning--interaction to create meaning, understanding, and skill. Teachers, like architects, do this by arranging the physical environments of classrooms. Beyond this, and more importantly, teachers design patterns of social interaction and individual action in the form of instructional activities.

The architect's means for creating meaning are form, structure, material, light, color, etc. The teacher's means are words and actions (as well as materials and environment). The architect creates ordered space. The teacher creates opportunities, occasions, and settings for interaction and growth.

Research on teacher planning has emphasized the importance of design in teaching (Clark and Yinger, 1979; Yinger, 1979, 1980; Yinger and Clark, 1982, 1983). Experienced teachers use powerful patterns in the form of activities and routines. The planning process takes the form of progressive elaboration of detail from general ideas. We have observed the differentiation and modification of existing routines into more suitable patterns. We have given teachers new

activities and seen them transform and contextualize them, imposing patterns and knowledge from experience. In short, our experience suggests that effective teaching relies upon the development and use of a professional pattern language——a language of practice.

There is something intuitively attractive about the notion of a pattern language. There is a resonant quality to the idea of individual patterns overlapping and intersecting to produce a basis for communication, interaction, and culture. There may even be something to the notion of patterns being engrained from the beginning of cultures in the forms of buildings and communities. Are there similar patterns in age-old activities such as worship, celebration, and teaching? Is there a finite set of possibilities or patterns that we seem comfortable with or that work? What would a pattern language for teaching be like?

A language of practice for teaching must be a language of action, a language of practical action. It must be more than just a language of method, or a language of outcomes, or a language of content. It must weave these components together as integrated patterns that illustrate practice as an artful combination of ends and means. A language of practice for teaching must also combine action with conditions where certain action is appropriate. The production systems described by cognitive psychologists are primitive patterns that embody conditions, means, and action. We need, however, to represent practice in larger, more visible patterns that are more accessible to the practitioner because they use more meaningful units of thought and action.

The form this language should take is not clear. Is Alexander's Pattern Language a useful model for a pattern language for teaching? Its network and systems characteristics would be a means for connecting patterns in communities to patterns in schools and these to patterns in classrooms and patterns in learners. There is a growing body of descriptive research that might serve as evidence for effective patterns of teaching and learning. Research techniques are being refined that allow us to elicit the practical knowledge of teachers and learners. There is probably embedded in the large existing collection of teaching method and technique patterns that have been oversimplified or merely overlooked.

I am not prepared to propose a pattern language for teaching at this time, but I am convinced that the possibilities look promising. What would it mean, for instance, to begin thinking of LEARNING BY DOING as a pattern? Could we connect it to or differentiate it from LEARNING BY WATCHING or TEACHING BY SHOWING HOW or EXPERT/NOVICE DIALOGUES? Could it be filled out and embellished by connecting it to learner patterns of LEARNING FROM MISTAKES or PRACTICE AND REFINEMENT or THINK ABOUT IT DIFFERENTLY? What about relationships to the physical patterns of classrooms: PRIVATE WORK SPACE, COMFORTABLE READING PLACE, GROWING THINGS, TEACHER'S PLACE, WORK DISPLAY, and so on?

Are these patterns at the right level of meaning? How might we find out? I think several things will be necessary for us to discover the language of practice for teaching. First, we need to spend a lot of time in classrooms observing and talking with teachers. We need to especially pay attention to process and stay long enough to observe repetition and change over time. It will be easier to see patterns of teaching, learning, and interaction as we become more sensitive to insiders' perspectives.

Second, we need to pay attention to teacher language. How do teachers talk about what they do? How do teachers share their experiences with each other? How does the language of novice teachers change over time? Though much of the language of practice is embodied in thought and action and not spoken, the natural language of teachers and learners can give us clues to the way they organize their world. To be meaningful in a community sense, a language of practice must use commonsense terms and practical reasoning as its vehicle. Otherwise, we will be stuck with a variation of our current educator or researcher language.

Third, we need to pay close attention to the interaction between expert and novice teachers and between master teachers and student teachers. These interactions may be a strategic research site for understanding and describing the language of practice and how it is learned. The acknowledged purpose of practicum or induction experiences is to demonstrate and communicate the practical knowledge of teaching. These are times, then, when implicit knowledge or action may come to the surface to be passed on to beginners.

Finally, we need to enter classrooms with open minds. Naturalistic research methods are more likely to be sensitive to finding out what is really out there than prespecified observation and coding schemes. There is much we do not know about learning to teach. We need to use methods that are adapted to portrayal. David Perkins in his book *The Mind's Best Work* (1981) relates a story about expectation, discovery, and surprise that contains an important reminder to researchers.

> A couple of years ago, my oldest son accosted me with news from kindergarten as I came home from the office. He had learned something about apples and wanted to demonstrate. Out of the drawer came a knife, one of those he was not supposed to handle, and out of the refrigerator a McIntosh.
>
> "Dad", he said, "Let me show you what's inside an apple."
>
> "I know what's inside an apple," I said, riding for a fall.
>
> "C'mon, just let me show you."
>
> "Listen, I've cut open lots of apples. Why ruin an apple just to show me something I already know?"
>
> "Just to take a look."
>
> Ungracefully, I gave in. He cut the apple in half, the wrong way. We all know the right way to cut apples. One starts at the stem and slices through to the dimple on the bottom. However, he turned the apple on its side, sliced the apple in half perpendicular to the stem, and displayed the result.
>
> "See, Dad. There's a star inside."
>
> Sure enough, there was. In cross-section, the core of the apple had made a distinct five-pointed star. How many apples had I eaten in my life, cutting them in half the right way and never suspecting the hidden pattern waiting for me until one day my child brought news of it home, out to convert the infidel——and he did (p. 288).

How many teachers have we observed in classrooms never suspecting the hidden patterns waiting for us, because we think we know how to slice the apple?

THE LANGUAGE OF PRACTICE AND INITIAL YEAR OF TEACHING PROGRAMS

Thus far, my argument may be summarized in this manner:

1. Teaching is a professional activity.

2. The practical nature of professional activity necessitates knowledge and skill arranged in a manner that is context sensitive, socially grounded, adaptive, and workable with limited resources.

3. Because of its particularistic nature, professional knowledge is not easily constructed from abstract, decontextualized knowledge and procedure. Rather, it is most effectively constructed in the context of practice by means of personal action and reflection——what I call "learning by doing."

4. The product of this kind of learning is a repertoire of knowledge and action, a language of practice, that becomes the basis for professional expertise.

The major question raised by this argument for programs designed to help teachers in their initial years in the profession is, "What can be done to help teachers develop an *adequate* language of practice?" Emphasizing adequacy introduces the notion of criteria or standards and suggests that certain forms of thought and action are better, i.e., more effective than others.

Kerr (1981) offers one means for addressing this issue in her analysis of teaching from the point of view of the philosophy of action. Simply stated, she argues that complex acts like teaching are mediated by other acts that may be judged in terms of their adequacy for achieving desired results. So in teaching the major act might be summarized as "engaging in activities the point of which is to facilitate learning" (p. 74). Teachers cannot achieve this act directly but must try to achieve it by mediating acts such as selecting materials, asking questions, giving demonstrations, and so forth.

Kerr factors goal directed action into three components: 1) choice of a goal, 2) choice of means (or planning) to reach that goal, and 3) acting on the plan. For teaching, the three primary components become:

1. Choosing learning to encourage.

2. Designing a plan to encourage that learning, and

3. Acting on the plan (implementation).

This breakdown highlights two significant points about the practice of teaching and the language of practice. First, factoring teaching into three components brings proper attention to the fact that teaching involves much more than implementing instruction. Planning, including the choice of goals, has an integral and necessary relation to the more visible classroom interaction component. This breakdown also reinforces the notions of teaching as a design profession introduced earlier and highlights the various types of thought and action that are a part of the language of practice for teaching.

Second, the idea that the mediating acts of teaching may be judged in terms of adequacy suggests that the quality of teaching (teacher effectiveness) may be assessed separately from post hoc and distal measures like student performance. It also suggests that there may be means by which to apply notions of adequacy to a language of practice.

In an action analysis, mediating actions are only useful if they are adequate for accomplishing the desired result. For instance, if I want to turn on the light (final desired action), I move the light switch (mediated action). This only works if the switch is wired to the light that I want to turn on. That is, the wiring must be connected for the mediating action (switching) to be adequate for the final action (lighting). To assess my lighting behavior, we can, in addition to judging the final outcome, examine and judge the adequacy ("connectedness") of my mediating actions ("Is that the right switch and is the wiring connected?").

In the same manner, Kerr argues that within the components of the teaching act, we should be able to judge the adequacy of the mediating actions (e.g., goals, plans, activities) devised by a teacher to achieve the final results. She suggests that a mediating action is adequate for any component teaching action only if the natures of 1) the subject matter, 2) learning, 3) the particular learner, 4) available means and resources, 5) the political and moral context, and 6) the other component teaching actions are taken into account. She states further, "The pertinent standards of assessment would be: what in the research community is believed about the nature of the subject matter, the characteristics of the learners and how one learns different things; the moral and political context of the case of teaching; and what is believed in the research community about the range of appropriateness and efficacy of available techniques and technologies" (p. 90).

These criteria serve as "relevant considerations," to become part of not only the judgment of other teachers' actions but part of the judgment of one's own goal setting, planning, and interaction with students. In other words, these considerations are the kind of criteria that should be an integral part of the language of practice for teaching. A goal of initial year of teaching programs should be to help new teachers integrate notions of adequacy into their own thought and action.

Beginning teachers require two types of information to develop an adequate language of practice. First, they need general knowledge about the profession and the conditions of practice. This knowledge serves to orient them to the tasks and contexts they will encounter, which will encourage realistic attitudes and expectations for practice. The following four headings representing the "commonplaces" of instruction illustrate the kind of general knowledge helpful to beginning teachers.

1. *The Milieu.* Recent research on classroom environments by educational anthropologists and ecological psychologists has revealed that classrooms are complex social organizations where social action and meaning are jointly constructed by teachers and students (Cazden, 1986; Doyle, 1986). At a micro level the complexity of classrooms make individual behavior difficult to predict. At a macro level classroom interaction is stabilized by frameworks for action such as activities and routines.

2. *The Learner.* According to cognitive learning theory, learning is a process controlled by the learner as he or she actively tries to make sense of the environment (Estes, 1978). Student understanding is not a simple matter of remembering information presented in the classroom. Comprehension results from an idiosyncratic process of integrating new knowledge with existing knowledge, beliefs, and conceptions.

3. *The Teacher.* Given the nature of learning, the teacher is not in the position of controlling student learning, but in the position of providing an environment to encourage learning and facilitate the student's quest for understanding (Smith, 1974). The necessity for mutual negotiation among classroom participants reveals that successful instruction is not a simple matter of implementing one's own plans or a curriculum developed by someone else. Successful instruction is jointly constructed by both teachers and students working together. Further, research suggests the knowledge and skill needed to orchestrate this kind of interaction requires years of experience to learn and refine.

4. *The Subject Matter.* Recently researchers have begun to address the specialized knowledge about subject matter teachers need to successfully teach (Shulman, 1986). Beyond the basic understanding of subject matter content, teachers must be knowledgeable of examples and other specialized means that are especially successful in facilitating student learning.

General, orienting knowledge of this type should be, and is in many cases, a part of teachers' preservice education. It may, however, be a good idea to provide opportunities to review and discuss these ideas with beginning teachers. What seems theoretical and far off to freshmen or sophomores seems very practical and relevant to teachers facing their first classroom.

The second type of knowledge beginning teachers need is particular about classrooms. Learning how particular methods and activities interact with particular learners in particular settings can only be achieved by actual teaching experience. A language of practice is developed as teachers learn the range of variation in students, the particular efficacy of technique, and the boundaries of classroom social systems. Experience provides particular knowledge about what works and about what forms of thought and action best fit one's own style of teaching and learning.

Initial year of teaching programs can facilitate this process by providing new teachers with opportunities to reflect on practice. They can reflect on the particular practice of other teachers by reading case studies of instruction or by observing experienced teachers. Probably more important, they should have opportunities to reflect on their own teaching.

Learning by doing, as described above, often takes the form of acting, observing the outcomes, and then modifying the action for next time. This paying attention to action is a reflective process and can be facilitated in a number of ways. For instance, writing in the form of personal journals or written narratives has been shown to be powerful means for promoting teacher insight and development (e.g., Yinger, 1985; Connelly and Clandinin, in press). Dialogues with other teachers, both beginners and experts, can also be extremely productive.

Though fairly simple and easy to implement, reflective writing and discussions are rare in the life of most teachers, especially beginners. These activities take time and must be valued enough for time to be provided and protected as an integral part of the teacher's job.

A Final Note

Every teacher will learn a language of practice in order to cope with the complexities of the profession. As we all know, the quality and adequacy of this language can vary widely. The initial years of teaching is the time when much of this learning takes place. Programs that provide facilitative environments and opportunities for reflection on practice may not only promote the development of a language of practice but promote the development of one that is both powerful and effective. And this is the hallmark of a true profession.

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THE PROCESS AND CONTENT OF INITIAL YEAR OF TEACHING PROGRAMS

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Recently, one of the authors of this paper received a letter from a student who had been in her high school English class some years ago. It was summertime, and the young woman was writing to say she had "weathered" her first year of teaching. Her first year of teaching had been tough. There had been pleasurable moments, but the painful incidents persisted in her memory and caused her to worry about the coming year. Her letter described one such painful moment this way:

> It was a Friday afternoon, three weeks after school had begun for the fall semester. I looked out my window to see an empty parking lot, and I felt like I was the only one in the building. I had had a particularly difficult day with my kids, and I felt terribly alone and extremely angry that things weren't going smoothly in my classroom. I had the sense of being overwhelmed (a feeling you know is rare to me) and I had spent lots of time trying to find some way to fix the problems I was having. I sat at my desk on that day and stared out into my classroom a long time. One question came to occupy my thoughts and echo in my mind, "WHY IS THIS HAPPENING TO ME?

This teacher's question is a common and very real one for many first year teachers. Unfortunately, the echo heard by this teacher is a familiar sound to other first year teachers as well. Despite recent initiatives, programs to help beginning teachers develop understandings of their work in complex environments are rare (Lanier, 1986), and the first year teachers often feel they simply manage to "survive" their initial year of teaching (Zeichner, 1983).

In this paper, we propose content and processes for initial year of teacher programs. Since the need to develop and support such programs has been argued elsewhere (see, for example, Griffin, 1986; Koehler, 1985; Ward, 1986), this paper assumes that the argument has been made and accepted. Instead, we will develop the general goals of a beginning teacher program by describing the ways in which beginning teachers differ from both preservice and experienced teachers in terms of knowledge, skill, attitudes, cognitive processes, and their needs in these areas. The paper then lays out a foundation for such a program based on a conception of teaching, of knowledge needs of beginning teachers, and of the learning-to-teach process.

Preservice, Beginning and Experienced Teachers

In the past, preservice teacher education has been asked to prepare their students to operate, on their first day of teaching, in exactly the same job description and context as experienced teachers. Those who advocate beginning teacher programs acknowledge the impossibility of this task. Beginning teachers have much to learn about teaching in general and about teaching in their specific contexts, and this learning cannot precede their being faced with the responsibility of planning and implementing a complete instructional program.

A question still remains, however, about what, in fact, can be learned in a preservice program. As Katz, et al. (1981) pointed out, it is difficult for preservice students to learn certain important aspects of classroom instruction without the "need to know" that comes from being confronted with complete responsibility. This is apparent in the classroom management area. Beginning

teachers complain about "classroom discipline" as if they had never received training in classroom management; whereas, their preservice instructors can indicate specific points at which classroom management was the focus in their courses.

In a review of the teacher education literature, Lanier (1985) concluded that there are many things that teachers can learn under conditions of formal instruction. So can preservice students. They can learn specific skills, such as questioning techniques and diagnosing reading problems; strategies, such as advanced organizers; and classroom analysis skills, such that they can analyze a videotape or naturalistic teaching sequence. They can also develop the attitude that learning to teach is a life-long process. Without experience and responsibility, however, they cannot learn to make the critical judgments concerning when and how to use a skill or strategy, how to balance one need versus another in the classroom, and which aspects of classroom disruption to ignore in attempts to maintain their students' attention on academic work. While student teaching begins to give them some opportunity to develop a sense of appropriateness, most student teachers immediately shift to a different context in their first year of teaching. These new contexts require different strategies and timing than those learned in student teaching as well as expanded understandings of teaching activities and events.

Thus, beginning teachers do not require training in general instructional skills as much as they need to expand their understandings of situations and alternative strategies. Such understandings allow them to make the appropriate judgments related to when and how to use the skills acquired in preservice teacher education.

We can also develop a sense of direction for beginning teacher programs by looking at the differences between beginning and experienced teachers. Recent research has examined differences between beginning and experienced teachers in the way they process information and the nature of the information they process. In general, beginning teachers are less efficient in their cognitive processing. For example, they tend to focus on situations and students that could disrupt their plans and are less tuned in to classroom cues than experienced teachers (Fogarty, Wang and Creek, 1982; Erickson, 1984). They tend to focus on bits of information without connecting them (Erickson, 1984).

> The experienced teachers' practical ways of seeing and making sense can be characterized as more differentiated and more comprehensive than those of beginning teachers, this does not mean that the experienced teachers' information seeking and decision making necessarily lead to optimally effective judgments about instruction. . . In short. . .it is possible that teachers can be misled by the acquisition of practical wisdom across many years of teaching. (pp. 1-6,7)

Beginning teacher programs, thus, can help teachers to move more quickly toward using efficient cognitive strategies and can also provide the kinds of understandings that will allow them to make effective judgments about management and instruction.

Conceptual Foundations for Initial Year of Teaching Programs

All teacher education programs reflect conceptions of (1) the nature of teaching, (2) the knowledge considered to be of most worth to teachers, and (3) the way knowledge is acquired. The broad program guidelines proposed in this paper reflect conceptions in these three domains as they pertain specifically to the needs of beginning teachers.

The Nature of Teaching

Teaching has long been considered as the things teachers do. As a result, proposals for improving teaching have usually dealt with discrete units of behavior, such as questioning techniques, clarity of presentations, desisting patterns, or instructional or management moves (Feiman-Nemser & Floden, 1986). As argued above, this conception may be more appropriate for preservice teacher education. For beginning teachers, a more fluid picture of teaching is appropriate, a picture that takes into account important cognitive dimensions such as problem solving and interpretation (Doyle, 1984, 1985), decision-making (Shavelson, 1981, 1983), conscious reflection (Koehler, 1985), and comprehension (Carter, 1985, 1986).

In this conception, planners of first-year programs would worry less about the *fundamental actions* of teaching and more about representing teaching as a *fundamentally cognitive act*. As will be seen, this shift from behavior to cognition has important consequences for the content and processes for an initial year of teaching program.

Knowledge Needs of Teachers

The skills and knowledge learned in preservice preparation do not prepare students to teach effectively in any type of context they will encounter when they begin to teach. Novice teachers often complain that the prescriptions learned in preservice are not useful and that they inadequately represent the problems they encounter in the "real world" of teaching (Koehler, 1985). If we concede that preservice preparation programs can only be responsible for transmitting certain skills and attitudes but not the complete understandings necessary to help teachers make informed judgments in different contexts, the knowledge needs of beginning teachers become clarified. For beginning teacher programs, the conception of teaching as fundamentally cognitive is highly appropriate. Such a conception emphasizes understandings rather than simply performances. Programs built on this conception would focus on a "prepotency" (Koehler, 1985) for dealing with the cognitive dilemmas (Lambert, 1984) posed by classroom events. From this perspective, a program would be valued not simply for its ability to provide exemplars for practice but also for its usefulness in activating productive cognitions in beginning teachers.

Learning to Teach

In a recent study comparing effective and less effective schools, Rosenholtz, Hoover-Dempsey, and Bassler (1986) asked teachers in 47 schools how long it had taken them to learn how to teach. In the least effective school, the average teacher response was 2.4 years and in the middle level schools, teachers responded five years; in the most effective schools, the teachers said that they were still learning. The teachers' view in the most effective school contrasts strongly with the prevailing sense that learning to teach is a simple matter of acquiring a well-formulated set of prescriptions for teaching. In this latter view, once the teacher has mastered the specified information, she must simply apply what has been learned in coursework to classroom settings. Koehler (1985) has argued that this view of learning to teach needs to be reconsidered. The process of learning to teach is more appropriately conceived as a cognitive developmental process and is best viewed as a lifelong activity (Griffin, 1986). Programs for new teachers should be structured to take into account the developmental nature of teachers' understanding about teaching.

Learning to teach may also involve an effective developmental process. Fuller (1969) and Fuller and Bown (1975) posit a three stage process in the development of concerns about teaching. In the first stage, teachers are concerned about survival; in the second, about the teaching situation; and in the third, about students and whether or not they are learning. While there is

some question as to whether these are truly stages (see Veenman, 1984, for a discussion of the literature), it is clear that beginning teachers are under considerable stress and are very much concerned about survival. It has been suggested, in fact, that we lose many good teachers from the profession because of the stressful first year and that many others develop inappropriate teaching strategies in the quest for survival (McDonald, 1980).

A beginning teacher program should help teachers to deal with these concerns such that they are able to acquire the understandings that will allow them to move to the second and third stages of concern.

Program Content

The previous discussion suggests that a viable initial year of teaching program is one which: (1) represents teaching as largely a cognitive activity, (2) reflects the knowledge-needs of beginning teachers, and (3) attends to the gradual process of learning to teach. One approach to developing such a program is to propose content which is intrinsically connected to the tasks of teaching. In this design, the major tasks teachers encounter in their occupational lives are used as the organizing framework for designing experiences that, on logical or empirical grounds, promise to provide first year teachers with the knowledge and skills necessary to accomplish these tasks.

The notion of "task," as it is used here, is borrowed from the work of Doyle (1984). Doyle has argued that the concept of task provides a window into the cognitive world of teaching. It calls attention to three basic dimensions of action-situation relationships: (a) a goal or end product to be achieved; (b) a problem space or set of conditions and resources available to research the goal state; and (c) the operations involved in assembling and using available resources.

Broadly speaking, teachers face two interrelated tasks in classrooms: (1) establishing and maintaining social order; and (2) representing and enacting the curriculum. The tasks of social order and curriculum enactment are accomplished interactively, i.e. the order and curriculum enactment are jointly constituted by teachers *and* students (see Erickson & Schultz, 1981). This interactive property of task accomplishment, combined with the inherent complexity of the task accomplishment, combined with the inherent complexity of the classroom environment (see Doyle, 1986), makes teaching in classrooms an extraordinarily difficult enterprise for beginning teachers. This suggests that the content of the initial year of teaching programs should reveal the complexity involved in accomplishing these two major tasks of teaching.

Content Related To Establishing and Maintaining Social Order

To accomplish the task of solving the problem of social order in classrooms, beginning teachers must organize groups of students, establish rules and procedures, elicit students' cooperation in classroom activities, and sustain order in designated blocks of time across several months. What content might be included in initial year of teaching programs to help teachers with this multifaceted task?

In recent years, an important body of knowledge has begun to build on effective management practices (e.g. Emmer, Evertson & Anderson, 1980). These studies have made it possible to identify a number of characteristics of well-managed classrooms and have resulted in some widely disseminated principles for practice (see, for example, Brophy, 1983). This research is likely to be useful for first-year teachers in planning for and organizing their classrooms. By drawing on this research, many teachers will be better equipped to establish rules and procedures for their classrooms, to arrange their physical environment so that it is conducive to instruction, and to monitor student engagement and their own use of time in classrooms. It serves as an important knowledge-base from which teachers can become acquainted with standard practices in classroom management and effective teaching.

There is some reason to believe, however, that this content is probably inadequate alone. Clements (1985) found that first-year teachers were similar to more experienced teachers in their positive reactions to a manual constructed around findings from research on teaching. At the same time, first year teachers actually used significantly fewer of the practices in their classes than their more experienced colleagues. The comparatively lower utilization scores for first year teachers probably reflects deficiencies in their understanding of classroom events and processes. As Doyle (1986) has argued:

> . . . management effectiveness cannot be defined solely in terms of rules for behavior. Effectiveness must also include such cognitive dimensions as comprehension and interpretation, skills which are necessary for recognizing when to act and how to improve classroom events to meet immediate circumstances.

This perspective suggests that it is important to focus an initial year of teaching program on the substance of teachers' thinking as they go about achieving and sustaining order in classrooms. Such a focus will enable first-year teachers to understand classroom events better and to use the knowledge base of the teaching profession more fully.

Previous research has suggested that teacher cognition is organized around the task of managing activities (Clark and Yinger, 1979) and that types of activities are significantly related to the behavior of teachers and students, in particular, the level of student involvement in work (Ross, 1984). More recent research (Carter, 1985, 1986; Doyle, 1985) suggests that in order to solve the problem of order over time, successful teachers focus on establishing and protecting work systems in classrooms by directing their attention to the maintenance of *classroom activities.* New teachers need to come to understand work systems in classrooms and to think through activity-related problems like pacing, flow, and participation.

It is suggested here that including content about how expert teachers think about and direct the initiation and maintenance of classroom activities would enable participants in initial year of teaching programs to (1) view classroom management as an organized system of acting *and* thinking; (2) analyze more systematically their own classroom practices; and (3) confront their own preconceptions about how classroom order is established and maintained. Moreover, it is likely that experience with this content will enable beginning teachers to better incorporate research findings into classroom practice by providing them with a framework through which to interpret, reflect, and assess their own classroom situations.

Content Related to Representing and Enacting the Curriculum

A major task of teachers is that of establishing classroom order and of maintaining this order over time. At the same time, beginning teachers must create work for students that conveys the curriculum, explain the intellectual processes involved in doing the work, and provide assistance and feedback as students carry out the complete assignments. For these reasons, Doyle (in press) has argued that *curriculum representation and enactment* constitutes a second major task of teachers.

A recent strand of classroom research has focused on this important task of teachers. Curriculum representation and enactment has been studied in the form of the *academic work* students are required to accomplish in science, English, and mathematics classes (see Doyle, 1984; Doyle & Carter, 1984; Sanford, Schmidt, French, Emmer, & Clements, 1985).

Studies to date have suggested that curriculum content can be represented in classrooms in many different ways. For example, writing can consist of having students combine short sentences to form more complex expressions or having them struggle to use imagery in a piece of

descriptive writing. Similarly, problem solving might involve applying a standard and predictable computational procedure to a set of 20 arithmetic problems or deciding which pieces of information are salient in a mathematics word problem. A teacher's topical plans or even her or his announced instructional goals provide minimal understanding about the actual curriculum being enacted in the class. To understand the curriculum in use in classrooms, it is necessary to examine the work a teacher requires students to accomplish with content.

Thoughts of beginning teachers often are about moment to moment management of student behaviors rather than about the cognitive demands required of students as they accomplish work in classrooms (Carter & Berliner, 1987). Without an understanding of the variable ways curriculum can be represented and enacted in classrooms, a beginning teacher may focus disproportionate energy on isolated managerial behaviors like reprimands and disciplinary measures and give little attention to shaping the cognitive demands of work for students. A preoccupation with what students are *doing* is likely to leave minimal mental space in which to consider the demands on students' thinking.

Even experienced teachers appear to be sensitive to the pressures different types of academic work place on the flow of work in classrooms and on students' willingness to cooperate in that work. Studies suggest that they respond to these pressures by manipulating work demands and accountability in a variety of subtle ways such as: reducing risk by setting up credit economies in their classrooms (whereby bonus points are given for reasons unrelated to student performance); regularizing and familiarizing work patterns so that the intellectual effort students must expend to accomplish assignments is substantially reduced; and, negotiating academic requirements down in an effort to keep students participating in work. (See, for example, Doyle & Carter, 1984). The upshot of these actions is often a serious reduction of cognitive demands in student work.

Findings from studies on academic work suggest that it would be important for initial year of teaching programs to include content which helps teachers to think about the ways curriculum gets represented and enacted in their classrooms. Especially important would be content which highlights the critical tensions between management and instruction. How these tensions are resolved affects the quality of learning opportunities for students and the quality of classroom life for students and their teachers.

We have suggested that it is important to include content in first year teaching programs which helps teachers grapple with the major tasks of teaching. We have argued that this content must represent teaching as cognitive problem solving. But how should this content be structured in a curriculum designed for beginning teachers?

Event Structured Knowledge and the Process of Learning to Teach

We have argued that beginning teachers need to develop a rich and dynamic picture of teaching, one which allows them to gradually acquire knowledge structures similar to those of experienced and expert teachers. Recent research on teacher thinking suggests that the knowledge and skills of expert teachers are ordered around *classroom events* rather than discrete teaching behaviors (questions, feedback, praise) or aspects of the content (e.g., comprehension monitoring, concepts, principles). Experienced teachers know, in other words, the common forms of activities and academic work as classroom occurrences. They know the texture of a lecture or a discussion or small-group work as it might occur in a classroom; they know how students react to various types of assignments in spelling, math, science, or composition; and they know how their actions are likely to affect situations. It is this event-structured knowledge that integrates the disparate elements of teaching and learning for teachers. A higher-order question, thus, is an event that occurs in a discussion, requires a long wait-time for a student answer, and is usually attempted only by the more academically advanced student. This knowledge is, in turn, embedded

in networks of information about managerial and academic work consequences of using higher order questions in a particular lesson with a specific group of students.

For beginning teachers, the acquisition of event-structured knowledge enables them to relate new information meaningfully to recognizable classroom events. Event-structured knowledge provides, in other words, an intellectual context for new teachers to begin to engage in practical reasoning about why things happen as they do in classrooms and about what decisions can be made to influence what goes on in their complex work environments.

Event-structured knowledge can be the coupler which enables beginning teachers to connect cognitively their teaching tasks to scenes and situations in living classrooms. Having this form of knowledge helps teachers to chart connections between a proposed method, for example, and the management demands posed by the actual *use* of this method. A teacher's choice to implement mastery learning, for example, can be made with particular reference to her class of 33 students in a fourth-hour, split-lunch period class. In this way, a beginning teacher can consider what demands implementation will place on his or her tasks of solving the problem of order and of representing and enacting the curriculum. He or she can then engage in mental problem-solving or practical reasoning activities to plan for the obstacles that are likely to be encountered.

Similarly, a teacher who wants students to generate a "strong ending" for a persuasive essay can mentally tie this objective to means and ends in classrooms. With a knowledge of classroom events, a teacher can begin to ask, "How might I get this concept across to my fifth-hour class? What kinds of questions are they likely to have about how to generate a strong ending? What resources can I use to make the concept meaningful? What forms of negotiations are students likely to engage in if they find the concept of a strong ending too difficult? What work arrangements can house this kind of higher order task for students?"

As event-structured knowledge builds, new teachers can make increasingly more accurate inferences and predictions about what can and may go on in classrooms. In short, this form of knowledge may be able to positively affect teachers' practical arguments (for a more complete discussion of teachers' practical arguments, see Fenstermacher, 1986). Content included in initial year of teaching programs can help to develop new teachers' understandings about how the quality of classroom events get shaped by people in those classrooms, the work arrangements, time, and tasks. This knowledge is necessary for beginning teachers to begin to form the action-situation connections that are basic to successful teaching.

Program Processes

We have suggested that the content of initial year of teaching programs needs to be organized around the two central tasks of teaching and that programs must focus on providing opportunities for first-year teachers to acquire event-structured knowledge. This content will allow program planners to reflect more accurately what teaching is, what the knowledge needs of beginning teachers are, and what the process of learning to teach is. What processes can be used to deliver this content to beginning teachers?

Past work on the structure of staff development programs is useful in setting general parameters and guidelines for the development of beginning teacher programs. For example, Griffin (1983) suggested from an analysis of research on staff development that eight features were indicators of "ideal" staff development programs. These eight features revolve around humanistic concepts of involvement of all participants in planning and implementing the program, responding to individual needs and settings, and reducing status differences among teachers and administrators.

In addition, a number of writers and recent reports propose that individual schools become professional development centers with norms of continuous improvement, collegiality, and autonomy with accountability *(A Nation Prepared*, 1986; Feiman-Nemser, 1983; Little, 1981; Little and Bird, 1983). In these schools, teachers are provided with support and encouragement to plan together and to observe each other.

While one would think that these schools would be helpful for beginning teachers, Little (in press) suggests that such schools, if not consciously developmental in approach, can place inordinate pressures on student and beginning teachers.

Structural aspects of beginning teacher programs have also been proposed. These include arrangements for pairing a beginning teacher with a "master" teacher, designing schedules so that observation and feedback sessions can be held, and recommending long-term as opposed to "one shot" inservice opportunities (see, for example, Borko, 1986).

These general features are extremely important in planning programs for beginning teachers, but they have been made in the absence of conceptions of the curriculum. The curriculum proposed above requires its own specific program processes, and these will be discussed below.

Studying Cases of Teaching

The development and use of a case literature holds particular promise in meeting several objectives we have set forth in this paper for initial year of teaching programs. First, the study of cases would help beginning teachers explore alternate courses of action for common classroom problems. If carefully designed, such cases not only provide exemplars of standard classroom practice but also capture the problematic aspects of the procedures and processes used in a particular situation. By highlighting decisions concerning routines, work arrangements, and interactions with students, cases can help beginning teachers engage in the basic professional processes of analysis, problem solving, and decision-making.

Cases can also serve as a catalyst for thinking about cognitive structures that underlie teaching practice. Cases of this nature explicate the understandings of teachers, i.e. how different teachers comprehend action-situation relationships in classroom environments. Examples of such cases can be found in Carter's (1985, 1986) recent work on teachers' comprehension of classroom management. This research will be briefly summarized to clarify how such cases are developed and to foreshadow their use in initial year of teaching programs.

Carter has begun to study contrast cases of successful and unsuccessful teachers as they go about solving the problem of order in classrooms in order to construct cognitive models that account for their solution strategies. In this research, thinking is inferred from an analysis of teachers' preoccupations and actions in accomplishing the management task. To conduct such an analysis and to develop cases of comprehension, it was first necessary to *model the task* and then to *describe how the task was accomplished*, including such matters as what the teachers attended to, talked about, and did in the task environment. Information about the task itself and how it was accomplished is obtained from extended classroom observations, often conducted on a daily basis over several weeks. From an analysis of this observational data it is possible to *construct a cognitive model* that accounts for the teacher's pattern of action in accomplishing the task of solving the problem of order.

This research has resulted in the development of cases of how four teachers' thoughts about classroom management were organized. The four teachers acted to solve the problem of order in very different ways, and these actions could be accounted for by different conceptions of how the task of achieving order in classrooms is accomplished. The different comprehension models have

been summarized in terms of an organizing metaphor and several principles consistent with that metaphor. In one case, for example, much of what the successful manager did could be explained by a conception of her role as pilot. This metaphor carried with it a sense of movement and flow as well as obstacles and hazards. In addition, it suggested that the teacher acted as if she were guiding an entity apart from herself, viz. the classroom activity system. These connotations were consistent with the teacher's emphasis on sustaining activities and steering around obstacles rather than confronting them directly with reprimands. In the contrast case, a less successful manager acted as a guardian of order, stopping the action frequently at any sign of inappropriate behavior. As a result, activities never had a chance to take hold and carry order in the class.

These cases suggest a possibility of exposing beginning teachers to cognitive models that underlie successful and unsuccessful performances as teachers attempt to accomplish major tasks in teaching. The utility of this emphasis on cognitive structures in cases rather than on prescriptive statements for practice can be seen if we think about a typical first-year teacher experiencing a typical half-day district-wide inservice session. A first-year teacher is likely to learn considerably more about teaching from study of cases than from such prescriptions as "Be vigilant" or "Scan the classroom to anticipate misbehavior." In fact, in the two cases just described from Carter's studies of teacher comprehension, one can see that the typical prescriptions would not appear to reflect the understandings of the more effective manager at all. The teacher who was doggedly vigilant and who constantly tried to anticipate and ward off any instance of student misbehavior had incredible problems of order.

We believe, then, that cases can play a central role in the initial year of teaching programs. In particular, cases can serve as *precedents* (see Shulman, 1985) to illustrate teaching practices and to show how those practices are used, providing new teachers with opportunities for active analysis and problem-solving. As Doyle (1986) suggests,

> Cases are essential to develop generator sets which enable teachers to recognize novel events, understand them, and devise sensible and educative ways of acting. Cases, in other words, become a way of knowing for professional practitioners.

It is worrisome that there has been a long-standing argument for the use of cases in teacher education, but little action has been taken as a result of that argument (See Doyle 1986). Shulman (1985) and Doyle (1986) have recently made compelling auguments for case use. But, cases will only be used in initial year of teaching programs to the extent that program planners believe that teaching is something more than doing, that teachers need to know something other than prescriptions for practice, and that learning to teach is not finished business once one gains the appropriate certificates and credentials.

Uses of the Cases

Cases may be used in a number of different ways and, in fact, need not be limited to use in beginning teacher programs. Cases may be used to complement previous proposals for initial year of teaching programs. For example, a well-designed program of inservice might be ordered around the study of cases of teaching. Schools might choose to invite speakers who would be willing to study a case and comment on it from their perspectives or expertise. Cases could also be used as an organizer to discussion in novice/master pairs. Case use in this framework would allow beginning teachers access to a master teacher's thoughts about classroom events and understandings about how classrooms work. Master teacher and novice pairings for the study of cases might positively influence discourse about teaching and thereby promote talk about teaching that would be qualitatively different from what has been found to be typical in teaching (see for example Griffin, 1986; Sarason, 1982).

Producing Cases of Teaching

One way to help beginning teachers become more analytic and reflective about their own practice is to provide them the opportunities to develop their own written cases of instruction. This would help to bring the cases mentioned above alive, as well as to provide them the opportunity to observe and to interpret other teachers' actions as solutions to situational dilemmas through complex cognitive processes. This would require thorough grounding in observation and interpretive skills, and the opportunity to observe in other beginning and experienced teachers' classrooms. In addition, the cases would need to be discussed with those who were observed and with others who are more experienced in the development and use of cases.

Networking

While professional development schools, as discussed above, could become ideal settings for beginning teachers, in most cases programs specifically designed for beginning teachers would have to go beyond the school as the program unit. Very few professional development schools exist (Bird, 1984), and one characteristic of these schools is their stable teaching force. They, therefore, hire few new teachers each year.

Beginning teachers should be afforded the opportunity to meet as a group to develop the sense of being members of important cohorts who are sharing an ordeal (Schlechty, 1985) and to understand that others are going through the same stressful period as they. This networking is important in the learning to teach developmental process, as beginning teachers talk to each other about their experiences in teaching, about cases, and about their concerns.

This means that a program for beginning teachers must move beyond the school level to encompass larger groups of beginning teachers. The school district, or clusters of schools, are the more appropriate program levels to allow groups of beginning teachers to come together for purposes of developing understandings of teaching.

A networking program element should not take the place of other aspects of a beginning teacher program such as master/novice teacher pairings; it should be in addition to such elements.

Practical Considerations

Two aspects of the beginning teacher program proposed above elevate it, in cost and effort, beyond many other beginning-teacher programs. The first involves the development of cases, and the second, the use of networking in addition to the school and classroom-based program elements such as master/novice teacher pairings.

The investment of resources necessary to develop a case literature will be significant. But, given the promise of such a literature in helping teachers develop common understandings about teaching, the benefits will be enormous. Further, case literature need not be developed by each program; it can accumulate across programs. And once developed, cases stand intact even though further research may change their analyses and interpretations. Therefore, the development of cases constitute front-end costs.

The networking guidelines would require beginning teachers in a school district or cluster of schools to get together once every or every other week. These meetings are not meant to be social events but will require case and program developers, discussion leaders, and master teachers to work with the novice teachers in their case-analyses activities. The networking activities are not meant to supplant other program elements. What this means is that novice teachers, and those master teachers who are working with them, must receive support in the form of release time to permit them to observe in other classes and to attend the networking activities.

Two practical considerations concerning these two program elements are discussed below.

Who Would Develop Cases?

The development of a case in teaching is a time-consuming and intellectually demanding task. It is our view that the practices and problematics of teaching and the understandings of teachers will be explicated best if school personnel (both teachers and instructional leaders), researchers, and teacher educators could devote energies to what would seem to be a mutually beneficial enterprise. In their work to develop representative cases of teaching, public school educators would be provided with professional opportunities to analyze and to discuss teaching and to reflect on their craft. Researchers with an interest in the cognitive aspect of teaching could study whether or not particular cases have the intended cognitive consequences for first-year teachers. And, teacher educators could begin to design increasingly more meaningful interventions as evidence begins to accumulate about what kinds of cases help bring about generative cognitions in novices which start them on the path toward expert performance.

Where Will the Money Come From?

To obtain support for this enterprise, educators will probably have to engage in political persuasion that has not been characteristic of our profession. Further, policy makers will have to change their beliefs about the education of teachers. A prevailing notion among state and federal policy makers is that the education of teachers simply requires the implementation of a number of prescriptive statements about "what works," albeit based on "research." Such a view is detrimental to the development of programs addressed to the complex cognitions and processes needed to effectively manage an instructional program. The prevailing notion is less expensive and is conducive to a view that change can be mandated from above.

Changing these views and acquiring adequate support for the type of program described above will require the concerted efforts of teacher educators, scholars, and public school educators. Teacher education will need to be viewed widely as the shared enterprise of the university and the public schools, and all parties will need to actively lobby for funding to support the enormity of the enterprise.

Summary

It is encouraging to know that there is currently considerable interest in developing initial year of teaching programs which can be responsive to the complexity of the work of teachers. Programs will be responsive to that complexity to the extent that the content and processes they include adequately reflect the cognitive dimensions involved in accomplishing the tasks of teaching and the developmental process of learning to teach. We have suggested that one approach for initial year of teaching programs is the careful and continued study of teaching cases.

We began this paper with the poignant question of a beginning teacher: "Why is this happening to me? Our hope is that cases can be developed and used to connect the question "WHY?" to reasons found in the realities of classroom life and classroom events.

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ON HELPING THE BEGINNING TEACHER

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A few years ago a children's album came out called, "Free to Be You and Me." On it was a song about helping that ended with the lines:

> Some kind of help is the kind of help that helping's all about.
> And some kind of help is the kind of help we all could do without.

The message of this song is clear——that help, no matter how well intentioned, isn't always helpful; in fact, it can sometimes make things worse. In our current rush to be helpful to beginning teachers, we may be attending too little to the nature of beginning and to the nature of the help we are offering. We may be putting in place assistance programs that undermine the development of natural helping environments and create costly, destructive situations far worse than the lonely, trial-by-fire initiation of beginners of the past. We may just be giving the beginner the kind of help we all could do without.

Examining the kinds of help for beginning teachers, in light of what we know about beginnings, is what this paper is mostly about. Its ultimate aim is discovering insights to assist in creating a new helping community for teachers——one that not only benefits the beginner but also the teachers who've been around for a while. Such a helping community, created within a school, is, I believe, an absolute necessity if we are to assure sustained care for beginners beyond those times when teacher shortages pique public concern.

I am going to organize this inquiry by using perspectives from several different disciplines, something like beaming light through a prism. As the discipline's prism is turned, it may reveal different, though inherently related aspects of beginning and helping that can contribute to a portrait of the helping community. The planes of the prism I'll draw on are sociology, anthropology, psychology, linguistics, and education.

The Sociology Plane

Two different ideas come to mind from the sociological literature, though there are many others, of course. The first idea on beginnings is that of self-socialization, a concept described rather fully by O.G. Brim (1966) twenty years ago. Brim explained that children are socialized by the human groups within their environment without controlling much about that socialization themselves. But, adults have much more control over their environments and, subsequently, much more control over who will socialize them and in what ways. So, when adults want to become part of some group they admire, such as an occupational group like teachers, they control events so that they are placed in situations to be socialized to be like them.

Depending on their own needs, perceptions, and history, they may each choose different socializing agents. Some may turn to teachers themselves; some will look to administrators, education professors, students, or others.

This all means that it is relatively unlikely that adults will become socialized to something they really don't choose for themselves. They will submit willingly to behaving within an acceptable range for the chosen group, or, if they decide not to submit, they will usually quit that

group and look for another. It also means that, though any number of potential socializing agents may be available, or may even be assigned, to socialize the individual, they may not all be equally successful in their efforts because the targeted adult has some choice in the matter.

A tilt of our inquiry prism brings us to a second idea on beginnings from Saul Levine (1976), a social psychologist who has attempted to describe the behavior of newcomers to a social situation as the behavior changes over time. One of Levine's studies looked at how draft evaders arriving in Canada adjusted to the stress of their new situations. Though draft evaders aren't in all ways like beginning teachers, there is something to be learned by looking at the stages the evaders went through and relating them to those of the teacher initiates.

The first period of time in which individuals enter a new setting is so filled with the events of getting situated that there is little time for reflection. Then, as the confusion subsides, a period of disillusionment or disorganization occurs. This disorganization is followed by a short "acting out" phase, in which the person copes by becoming somewhat exploitative of others and/or non-involved. Then comes a longer period of searching in which the individual re-examines his or her life in a more reflective manner. Finally, the phase of adaptation and integration may be reached, and the person finds total involvement in the new life.

This work by Levine suggests that the newcomer cannot be abandoned after the first settling in has occurred. Technical help must be available during the first few confusing days, but an equally important second wave of a different kind of help is necessary as disorganization occurs. Then, during the acting out period, the help must continue while the individual's independence is encouraged indirectly until the reflective period can be reached. During this thoughtful phase, help must be continued that will allow the newcomer to re-examine the new life within the occupation and to develop a comfortable adaptation of self and role (role personalization).

The whole cycle of integration apparently cannot be put on a strict timetable. Individuals vary in the time spent in each phase because integration is a creative act, not a training act. The kind of help offered must correspond to the phase the person is in, not some pre-ordained schedule.

The Anthropology Plane

Now let us turn the prism to the anthropology plane for another perspective on beginning. You are aware, of course, that anthropologists have long been interested in beginnings or transitions, and in the ways human beings all over the world smooth the movement from one state to another. In the 1920's, Arnold van Gennep was, I think, the first to label the formalized group efforts as "*rites de passage.*" Rites of passage for role transitions such as birth, death, marriage, and puberty have been observed to divide into three parts: a separation from the old state of things; a marginal period; and an aggregation to a new condition. All of the ceremonies surrounding these events are aimed toward reduction of the harmful effects of the transition (Gluckman, 1962), but they also have the effect of strengthening a sense of community among all the members of the social group.

In modern western culture, rites of passage have been eliminated for many transitions, but a few ceremonies may still be found to mark separations and aggregation——commencement and orientation convocations, for example. Rituals of passage are generally minimal in nature or nonexistent in the transitions into most modern occupations, though tribal groups often made such occupational role transitions a time of great ceremony.

The loss of rites of passage for stress-producing occupational entry has been mourned, but that loss need not be irreversible. Rites can be created anew by those who are sensitive to their importance in easing transitions. Orientation to a new job can include initiation rites; other

moments can be created as milestones during the early months on the job. Further, such rituals can be extended through the first year and throughout the career.

The Psychology Plane

I am concerned that educators too frequently turn first and then *only* to psychology for direction to their work, so I have deliberately placed it later in this paper and in my own thinking. There are, however, some significant ideas that emerge from psychology that I think are important, two of which I will raise here. The first is that of cognitive development stages in the tradition of Jean Piaget. The second is the concept of developmental tasks proposed by Erik Erikson.

When Piaget first did his work on cognitive development, his focus was mostly on the stages of development among younger children and adolescents. More recent work has also examined the cognitive functioning of adults. In general, the results of this research seem to show that somewhat better than half the adult population reaches formal operational thought (that is, hypothetical thought), and far less than that reach the most advanced formal functioning (c.f., Hultsch and Deutsch, 1981, for a discussion). Studies with college students have shown many of them are not functioning at the formal level even though they are considered academically able. In some of this research there is evidence that people are more likely to function formally in problem situations with which they are familiar, but they will also be motivated to begin using formal thought in new problems of interest to them, say, in new occupational situations (Schaie, 1977). Formal operational thought can and should be a consciously sought educational end for those who work with adults in new roles; for, both the motivated state of the learner and the rich context enhance the likelihood of cognitive development.

Erik Erikson's work (1959, 1963), like Piaget's, is likely to be somewhat familiar, though, again, its use has been mostly in educational programs for children and adolescents. You will remember that Erikson proposed the existence of eight psychosocial stages of human development. Within each stage the ego must be developed by the individual to respond to the demands of society at that point in the life span. Each stage is a crisis, and the individual must attain the necessary ability to resolve the crisis or suffer the consequences.

The first five stages reach up through adolescence, but the last three are stages of concern in young adulthood, middle adulthood, and old age. They are: intimacy versus isolation; generativity versus stagnation; and ego integrity versus despair. The intimacy stage is the one of most concern to us here, but that of generativity ought also to be considered, for these two stages about cover the maturational groups entering new occupations.

The intimacy crisis begins as one seeks to relate fully to at least one significant other. It requires risking the sharing of all aspects of the self with another while coming to grips with one's fear of loss of identity. Furthermore, the person must also be receptive to the sharing of the other persons. If this mutual sharing is unaccomplished, the individual will experience isolation.

Once intimacy is resolved, the person begins to move on to deal with the stage of generativity and seeks some way to contribute to the maintenance of society. If this way to contribute is not found, the person experiences stagnation and dissatisfaction. This stagnation is part of what in pop culture is termed "mid-life crisis."

Awareness that young adults are probably beginning to experience one of these two adult developmental stages, most likely the intimacy search, should make us more sensitive to the relationship between the beginners' personal lives and their performance on the job. It should make us aware of the kinds of relationships they may be seeking among their colleagues, too, for

these intimate relationships are not confined to those of a romantic nature, but may also be found between good friends.

If the beginners are more mature, they may consider the occupational choice itself their response to the generativity need. Contributing to the social good by engaging in a particular occupation must be reaffirmed for them as a worthy personal response to the generative need. This must be done by all manner of communications from those around them, especially as these individuals move through the trying period as a newcomer.

This has certainly not been an exhaustive exploration through the inquiry prism, but the few ideas on beginnings should be instructive in creating a portrait of the helping community. Before that picture is drawn, however, we can turn the prism again for an examination of the second important element-helping.

Helping Viewed Through the Linguistic Plane

I would ask you to think with me a bit on the difference between the words *help* and *assistance*. They may sound like the same thing; we often use the two words interchangeably. But, the two are from different linguistic bases with different denotations. They also carry different connotations. Assistance is from the Latin base *assistere*, [meaning, "to take one's stand toward or to stand by."] "Help," on the other hand, is from the Old Teutonic verb form *holpen*, translated as "to furnish a person with what is serviceable to his efforts or his needs." Assistance, then, suggests one kind of action, a somewhat unemotional act of standing near, with the focus on the stander. Help suggests a different action, a giving, but with the focus on the needy receiver. One word, "assistance," has come to our language through the Latin-educated ruling class and subsequently carries a formal tone with it. The other term, "help," is a word of the common people and is more familial, more familiar; help means getting involved.

The underlying difference in the two words can by itself stimulate our thinking about the nature of helping, but with a slight turn of the prism, back to the anthropology plane, we can expand the inquiry in a useful way. The difference between the two terms is, I believe, related to two larger constructs presented in the work of anthropologist Marcel Mauss (1924 in French, 1967 in translation) and more recently developed by Lewis Hyde (1979), a poet and literary critic. Mauss described the two primary forms of economic exchange systems used by human beings: the market economy, in which objects are bought and sold and which we readily recognize as the primary basis of exchange in our own culture; and gift exchange, an older, sometimes considered more primitive, form of exchange system with which we are tacitly familiar. In the gift exchange system, the giving of gifts ensures the livelihood of the spirit of the gift; it moves the receiver as well as the giver. In a gift exchange economy, the gift must be passed along, given away to a third party, or it ceases to be a gift and to maintain or to grow in worth. Through the passage of the gift, people are bound to each other, so the gift becomes a vehicle of cohesiveness in the culture.

An item may be not only part of the gift exchange system but also may become a commodity in the market economy. Things bought and sold through a market economy will be talked about differently because they take on different properties when handled as commodities. A commodity, for example, has a dollar value placed on it while a gift has a kind of incalculable worth. Commodities do not have the binding social force that gifts possess; they are affect-neutral. In fact, their lack of binding affect gives them utility when one is dealing with strangers. Once a sale is complete, one party has no obligation to the other.

It seems, then, that "help" and "assistance" are terms for the manifestation of an action as it exists in the gift exchange system (help) and in the market economy (assistance). Help is socially

binding; assistance is socially neutral——a service of strangers. Help is given without the expectation of remuneration; assistance has a price tag. When help is given, the sense of obligation felt by the receiver often later moves them to help someone in a similar situation; when assistance is provided, the receiver walks away with no future commitment to similar acts.

Let me provide just one example, of the survival value of help, in the sense of gift-giving. Terrence Des Pres' book, *The Survivor* (1976), relates tales of those who have survived death camp experiences. It is aimed at discerning the reasons some people have been able to survive these horrible imprisonments when so many others did not. Des Pres' conclusion is revealing. He asserts that those who survived were not lone wolves who only looked after themselves, as some have argued. Rather, they were those who formed themselves into extended families, who helped each other, gave gifts to each other, and in general cared for and protected each other. Helping and gift-giving bound these individuals together and enabled them to survive under the worst of all possible conditions.

So, I conclude from this and from Mauss' and Hyde's work, that when group survival, group spirit, fellowship, or community is the goal, gift-giving help is what must be sought to cement it. Affect-neutral, marketed assistance will be sufficient to accomplish certain services, but by itself it is short-term, creates no expectations for continuing relationships, and is only likely to exist as long as someone is willing to keep paying the bill.

Forms of Help: An Education Perspective

Now turn the prism again to look at helping from another perspective, and that is the educator's view on the forms of help (here used generically). For simplicity's sake, I group help into three categories: direct aid, indirect enabling, and affirmation. Perhaps a brief description of each category is needed.

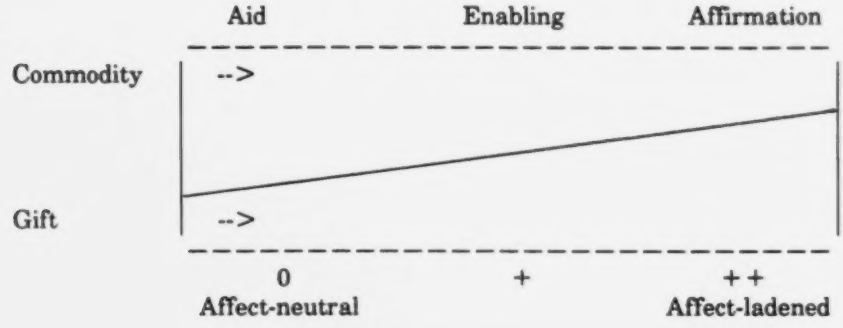
The first kind of help, aid, is quite concrete. The help is tangible, or at least readily describable, and is often the first helping action in times of threatened survival. One person may give the other material goods of need or take some action that solves a problem the person has, like cleaning a wound, fixing a tire, providing food, or giving specific advice or needed information.

Immediate, direct intervention may be demanded by emergency situations, but it is generally a short-term response. On the other hand, the second kind of helping, indirect enabling, is more subtle, slower in coming, and generally takes longer, but it also shows long term results. In indirect help, the helper sets up conditions that enable the helped parties to do for themselves. The involvement comes in learning enough about the ones in need to be able to plan the conditions that will allow this self-help to occur. So, instead of fixing the tire, you teach the person how to fix it herself; instead of giving information you explain to him how to find it and other information; instead of solving other people's problems, you enhance their ability to solve them by themselves.

The third kind of help is subtler still, and that is affirmation help. This help is more difficult to describe. It consists mostly of being there——being present to the needing individual as an authentic person, a listener, responder, clarifier of their own thoughts and feelings. It is affirming, and believing in the other person's potential. Explaining just how this help is given is difficult even for the one who has been helped. It is, for example, what proteges try most to describe about their mentors, yet for which they often find words inadequate. Without question, however, this kind of help demands both time and an investment of self.

We can put these three kinds of help on a continuum running from the potentially affect-neutral aid, to the affect-laden affirmation. I do not mean to imply that aid is totally devoid of affect and that affirmation is full of it, rather that aid can be carried out with little caring for the

particular individual while each of the others is increasingly dependent on it to work. One can fix a tire for someone without empathizing a great deal with them, spending extensive time with them, or responding to their humanness. On the other hand, when one purports to help by affirming, one needs to be sensitive to the others' feelings, to their subjective experience——their expressed needs. In short, one needs not only to care but also to be experienced as caring by the needing person.



No one of the three kinds of help is automatically of the gift-giving spirit. Each kind has been known to be both bought and sold as assistance and given away as help. However, the longer-term commitment and personalized relationship inherent in the indirect enabling form, and especially in the affirming help form, make them more likely to be associated with the gift exchange system *if they are to be done effectively.* When people accept money for these kinds of help, the money is frequently only a secondary motivator; the satisfaction of the work comes first. Once again, I am not saying that those who give the first kind of help are only in it for the money. I am saying that this kind of more technical, short-term help *can* be provided quite efficiently by someone who has no extended personal investment in the individuals being helped. We like it when those giving direct aid are both efficient and caring. But, because direct help is most needed in survival threatening times, efficiency is more important than caring at the moment. This is less true for indirect help, and not at all true for genuine affirming help.

The Helping Community

Taken together, all of the prismatic rays on beginning and helping can be drawn together in a portrait of what ought to be, a portrait of help that "helping's all about"——the helping community. My portrait is of a group of teachers, administrators, and support staff members in a school who have been helped themselves to such a degree and in such ways that they all see helping as an inherent part of their roles with newcomers and oldtimers. They form the kind of extended family that DesPres discovered among the survivors and that Marcel Mauss saw in tribal groups.

Entrants to this community will be ceremoniously initiated into their roles within it. They will recognize by the rites of passage that this is a stable community, yet one that has room for them, a beginner. They will find affirmation in the rites of the worthiness of their choice of teaching, and they will feel a kinship with those who participate in the ceremony as initiators and as witnesses.

The entrants will find help given to them by a variety of people in the early weeks of survival. Much of it will be direct aid, perhaps from those beyond the primary community or often from those within it who are specifically assigned the tasks of technical assistance. The beginner will be provided timely information on procedures, on materials and curriculum, on exactly what needs

to be done when and with whom. As the beginners continue in their work, however, they will be carefully watched by all the others for the early signs of the disorganization/disenchantment that Levine saw among newcomers and that we know from our research in education beginning teachers do experience.

Now the community members will consult with each other, in a kind of staffing, to plan for different kinds of help during this critical time and beyond. Knowing full well that the beginner will be an active self-socializer, the community will consider the beginner's choices of contacts to date. They will invite the beginner to name those from whom they would like special help, and they will then tentatively designate a team or single individual to offer further help. Perhaps it will be another teacher or two or maybe an administrator or support staff member. That person or team will move to shore up the newcomer's flagging enthusiasm, to provide support and warmth--the affirmation help now required. Others will help, too, stepping in whenever it seems right, not waiting to be asked. Technical assistance may continue to be needed here, but it is likely to take a somewhat lower priority for now.

As the beginner moves through the period of disorganization, his or her needs will be reviewed for forms of indirect intervention now relevant. These enabling interventions may sometimes be skills focused, but whenever possible, they will be designed to further the beginner's cognitive development. Does the beginner express a need for help to deal with discipline problems? Then it may be appropriate to engage her in a series of conversational lessons about alternative approaches--hypothetical choices. Does he express concerns about balancing home and family responsibilities with school work? Now may be the time for the designated helpers to spend time in dialogue about how they and others deal with similar problems. Through these dialogues, the helpers and the helped may find not just a collection of individuals with similar circumstances and complaints, but a growing circle of intimate friendship. The helpers may well find the dialogues stimulating to their own thinking about the various issues and recognize that they are benefiting, too. Apropos of this, Walt Whitman said: "The gift is to the giver and comes back most to him. It cannot fail."

Throughout the early weeks and months, the community has continued to provide the rites of aggregation that will draw in the initiate, reduce the sense of beginner's isolation, and build the group spirit. These are not necessarily large public displays but often private, intimate rites. The beginner's small and great victories in teaching will be noted; firsts will be celebrated--first report cards completed, first parent open-house, first supervisory visit.

When the phase of more careful reflection begins, the helping community will already be responding in ways that will meet the needs of the newcomer. Dialogue will be a regular part of the group members', and especially the designated helper's, interactions with the beginner and with each other. They will have built into their work week time together for professional dialogue; the sacredness of this time will be guarded by teachers and principal alike. The beginner will have seen that this whole group talks authentic teacher talk, so his own search for integration is accepted as valuable, natural, and right.

By the year's end, the beginner should have the sense that though she does not feel like a master teacher yet, she has set her foot on a path that will be a continuing source of challenge and satisfaction for her as it has been for those of the helping community around her. Moreovers, she will recognize that her giving through teaching has been enhanced by becoming part of the helping community and that she can make many opportunities to help not only her students but also her colleagues, just as so many of them have helped her. They each know that they have been cared for and that they must pass on the gift of help to others in order to be worthy of that care.

This vision may sound utopian--it surely is, but I think it can point up a number of deficiencies in the kinds of beginning teacher programs that have been rushed into place in school districts throughout the states, including my own. They are short on help in the spirit of the gift; they are long on market economy assistance. They are full of packets and packaged instructional programs of direct intervention but often devoid of real enabling help, authentic affirming dialogue. They show no regard for the rituals human beings need and little understanding of the stages of newcomers or their preferences for socializing agents. They assume scant responsibility for cognitive development of the young adult and even less responsibility for helping that young adult deal with the crisis of intimacy or the need for generativity.

Most problematic of all, these programs are inadvertently sabotaging the development of the helping communities that could assure continuing care for future generations of beginning teachers. They are doing this by concentrating on the purchase of direct aid and narrowly-defined enabling help from "mentors" and state and local support staff. In the meantime, other potential natural helpers are led to believe that they have no need to get involved; the beginner is in the hands of the paid helpers. In turn, the beginners, whose only help has now come from paid helpers, feel no obligation to help the next cohort unless they, too, are paid.

When the gift chain is broken by the introduction of the expectation that help is just one more commodity to be purchased, re-establishing the chain is extremely difficult. Some might say, nearly impossible. And then, when state and local funds are withdrawn from the beginning teacher programs because teachers are no longer in short supply and, therefore, less a matter of concern, beginners will once again be left in unhealthy isolation; so will their continuing colleagues.

Our support for beginning teacher programs must assure, therefore, that the building of helping communities within each school is given attention equal to, if not greater than, the development of large-scale technical assistance programs and training packages. Only with the encouragement of these communities, that are mindful of what we know about beginnings and helping, can we be sure that teachers, beginners and veterans alike, will be given a balance of the aid, the enabling help, and the affirmation they need. That is the kind of help that helping's all about.

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ASSESSMENT ISSUES IN INITIAL YEAR OF TEACHING PROGRAMS

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Illinois will be joining other states which have expanded teacher education beyond the traditional preservice training to include an induction program for beginning teachers. As with most induction programs (Hoffman and Defino, 1984), the Initial Year of Teaching Program in Illinois will probably combine support for and evaluation of beginning teachers as they go about the task of learning to teach in a school setting. The purpose of this paper is to address selected issues related to the assessment of beginning teachers as a component of an induction program. The perspective taken is one of interconnectedness: the assessment system operates within the induction program within the political, educational, and social systems in the state, not in isolation. With this perspective in mind, policy, technical, and implementation issues related to the development of an assessment system are discussed. The paper closes with a brief discussion of the relationship of the assessment system to preservice and inservice training.

Policy Issues

Goal Setting

Central to the development of a sound assessment system for beginning teachers is the need for a clear statement of purposes and goals for the induction program (Wise, Darling-Hammond, McLaughlin, and Bernstein, 1984). A well-integrated, conceptually sound, and inherently complex program flows from a clear statement of purposes. Secondly, process of design and development for such a program involves hundreds of decisions which will logically be evaluated against those purposes and goals. From another perspective, program goals place parameters around a core concept of the competent beginning teacher and ultimately determine what is measured, how it is measured, and how the information is used, i.e., the assessment system for the beginning teacher. For the purposes of this paper, it is assumed that the information produced by the assessment system will be used for criterion-referenced decision making, i.e., whether the beginning teacher meets or exceeds the minimum standards for certification.

Securing a clear statement of goals and maintaining commitment to those goals may appear to be relatively simple tasks. This is not the case. Support for broadly-stated goals will be widespread; few will argue against "insuring that teachers entering the profession are competent" as a laudable goal for a beginning teacher program. This widespread support is usually achieveable because statements of goals do not contain operational definitions, identifiable checkpoints, and particular methods of measurement, the rallying points for controversy. However, once questions about instruments, procedures, and evaluators are under discussion, the system begins to take on recognizable form, and potential points of conflict begin to emerge. Those points of conflict are championed or attacked by interest groups in direct relationship to the amount of power and influence to be won or lost by those particular groups. Policy makers will be pressured to "hold the line" or, conversely, to reexamine, and perhaps to alter, the original goals. If the original goals are altered, then the design work completed to that point will require revision or, in many cases, complete retrenchment. Therefore, the time taken to forge a consensus statement of goals and purposes of the program, to make policy makers aware of the trade-offs associated with the various options, and to foster early support for the goals of the induction program is time well spent.

State and Local Relationships

Within the limitations of the legislative mandate which usually accompanies an induction program, balance between state and local decison making and authority must be determined. The current trend, following a rash of state-directed efforts, is to authorize, and occasionally finance, a number of pilot projects which, in effect, direct more of the development effort to the local education agencies. Thus, the oversight of the state is combined with a broader allowance for local initiative, and a variety of models to study are produced prior to statewide implementation. If the legislative mandate and the development schedule allow, several models might be accepted for further refinement and implementation as an alternative to developing and implementing a single statewide system. While the final decision resides with policy makers at the state level, the potential for early support for the program is enhanced when local options are maintained. Every reasonable effort should be made to foster support for the program, especially at the local level.

Variations

A related issue involves the concept of variation itself. Studies of program implementation have established that variations occur during implementation despite the efforts of developers to enforce consistency, even conformity, through planning, training, and materials. Policy makers must decide not "whether" but "how much" variation the legislative mandate can sustain. Should several programs be authorized? Should local districts have an option in selecting from among instruments to be used to assess beginning teachers? Should local districts have the authority to establish timelines for conducting observations, or should the state determine the timeline? Each question has implications for the relationship between the state and local authorities and for the integrity of the induction program. Ultimately, the amount of variation allowable depends upon the level of consistency needed for legally and professionally defensible decisions to award or deny certification of individuals.

Development Standards

Standards to guide the development process for the assessment system must be determined at the outset since that process takes on particular importance with respect to legal defensibility. Defensibility is especially important when the decision making affects certification. Standards and guidance can be adapted from several sources among which the work done by Carey for the National Council of States in Inservice Education (1985) is an example. According to Carey, programs of evaluation must meet standards for accuracy, utility, practicality, and feasibility. Because resources are limited, these are competing standards, and program designers must achieve a balance among them. For example, one objective may be a highly accurate system. However, that system may require so much time and effort that it becomes impractical and loses the support of the users.

In addition, the system must be designed with consideration for the issues of fairness and equity. In the strictest sense, because the assessment of beginning teachers affects certification, the employability of the individuals involved is also affected. With this in mind, the requirements contained in the *Uniform Guidelines on Employee Selection Procedures (1978)* should also be considered in the development process. Those guidelines specify standards against which the validity of assessments used for employment, promotion, and other personnel decisions will be judged. If the results of the assessment have an adverse impact on identified groups, the developer must be able to show that the requirements outlined in the federal guidelines have been met in an effort to eliminate or to minimize the potential for adverse impact.

Development Process

Securing input. Deciding which groups will be invited to participate in the design of the assessment system will be one of the first development decisions. Each of the groups which has legitimate interests should be represented in the process; to ignore a group reduces the likelihood that all of the important players will accept and actively support the system. Potentially conflicting interests should be represented in the early stages of design, for they will surely appear in the later stages. If the issues are raised early and compromises struck, then the potential for new, significant issues emerging later in the process is reduced.

Communications. The timing and nature of communications with policy makers, with the profession, and with the general public are critical. The danger of significant decisions being made in isolation, without relevant, current information, without avenues for professional and public input is very real. Up-to-date information must be widely distributed during the development process. Of course, sharing information which changes daily, or even hourly, carries with it other problems. Regular, informal communication with the professional associations representing teachers, administrators, parents, colleges and universities, the private sectors, and other interested groups is crucial in the support-building process for the assessment system. There is a negative aspect to openness--the dangers of political manipulation and of poorly qualified individuals making highly technical decisions.

Resource allocation. A commitment must be made to devote adequate lead time for the development of the assessment system, to devote adequate resources to the project, and to support continuous research and evaluation of the induction program and of the assessment system. Often, the decision to institute a program is made on political grounds without attention to the inherent limitations of personnel evaluation and without the necessary allocation of resources to accomplish a very difficult task.

The following are all tasks which must be accomplished before implementation: Initial planning; recruiting experts and a committee of advisors; surveying the relevant literature; reviewing current practices; designing procedures; making decisions about measurement issues; conducting a pilot study; designing the training program; and producing materials for assessment system. At a minimum, two years, one for development and one for testing, are needed to design the assessment system. This estimate is based upon the recent experience in Texas where an assessment system to accompany the career ladder was implemented in 1986 (Barnes & Dodds, 1986).

Resources are needed for securing consultants with nationally recognized expertise for supporting an adequate core staff, for preparing and distributing draft materials, for conducting a pilot study of the system, for developing the training program for assessors, college and university faculty members, and beginning teachers, and for preparing and distributing high quality training materials. Policy makers may not be aware of the need for continued commitment to the improvement of the assessment system over time and, as a consequence, may not have allocated adequate resources for this need. It is a critical need given the limitations of the state of the art of teacher evaluation (Popham, 1985).

Technical Issues

General Discussion

For the induction program which carries with it certification requirements for beginning teachers, an assessment system which verifies the minimum competence of the beginning teacher is necessary. The system must supply information for what will essentially be a "yes" or "no"

decision for certification. Evaluators will be confirming that the beginning teacher possesses at least the knowledge and skill, determined by the teaching field, to be necessary to begin successful teaching. Identifying fine gradations of teaching skill and expertise are not demanded for this particular decision-making, and, as a result, the technical requirements are less stringent than when the system must provide information for ranking teachers for merit decisions.

Central to the assessment of beginning teachers are decisions about what to measure, how to measure it, and how to use the information gathered. These decisions are made within the broader context of the goals and purposes of the induction program and, in a narrower sense, the particular view of teaching implicit within these goals.

In their report of effective teacher evaluation practices, Wise, Darling-Hammond, McLaughlin, and Bernstein (1984) classified teacher evaluation according to purpose, implicit views of teaching, the interrelationships between these concepts, and implications of each category for assessment. According to their framework, teacher evaluation is conducted to provide information for either individual growth or staff development and for either individual-level or school-level personnel decisions. The technical requirements for evaluation focused on staff development are less stringent: this evaluation can be more descriptive, open-ended, and subjective without extreme attention to legal defensibility. At the other extreme, personnel decisions focus upon accountability, and, therefore, such evaluations must meet the highest standards of reliability and validity. Personnel decisions require objective, standardized evaluations which are extremely defensible, both legally and professionally. These evaluations must be based upon accurate, comprehensive, generalizable, agreed upon, and uniformly applied criteria, i.e., valid criteria. In addition, the process of gathering information must ensure that evaluation is reliable.

Knowledge Base for Selection of Criteria

The choice of the knowledge base providing the foundation of the assessment system will be dependent upon the goals and purposes of the induction program. If the stated purpose is to increase student achievement in the classes of beginning teachers, then one knowledge base is more appropriate than another. If the stated purpose is to support the beginning teacher in the classroom, then another knowledge base is more appropriate. If both increased achievement and support are goals, then some compromise combining elements of both knowledge bases is indicated. Likewise, a heavier reliance upon classroom-based research or craft knowledge or propositional knowledge will be more appropriate with other goals and purposes. None of these sources is so fully developed that teaching can be adequately evaluated using that source alone. The state of the art is such that some combination of research, proposition, and craft knowledge must be forged to serve as the foundation of the assessment system. To artificially rely upon a single source of knowledge as a basis will result in an artificially shallow view of teaching for assessment and certification. Once the knowledge bases are agreed upon, the potential content for the assessment system can be identified and subjected to a validation process.

Validity

To question the validity of an assessment system is to ask whether the system is measuring what it is supposed to measure. At a minimum, the system must possess content, criterion, and construct validity. Content validity can be established through several methods, one of which is to secure a definition of teacher competence from a panel of experts and/or an adequate sample of representatives of the teaching field. They must agree that the criteria used to define teacher competence for evaluation purposes represent *critical* dimensions of the job. The critical dimensions are usually established in terms of (1) whether the behaviors are important to the job, (2) how frequently the behaviors are used in the job, and (3) whether the behaviors represent the full scope of job responsibilities (Barnes & Dodds, 1986). The criteria must be considered *critical*

to success in the job by a substantial portion of the representatives. This agreement is often obtained through interviews, surveys, questionnaires, or panel reviews with practicing teachers and others with expertise in teaching and by examination of policies and documents pertaining to the duties and responsibilities of teaching. All of this effort is directed toward establishing the job-relatedness of the criteria chosen for evaluation——essentially a job description.

In establishing job-relatedness, the designer must make the assumption that certain teaching skills are common to all teaching assignments. An examination of literature and evaluation systems currently in use across the country will identify the skills commonly assessed: planning, implementing, and evaluating instruction; classroom management; communication; knowledge of subject matter; professional duties and responsibilities; and personal characteristics (Wise, Darling-Hammond, McLaughlin, & Bernstein, 1984; Stoldolsky, 1984).

To establish criterion validity, the system must demonstrate that decisions based upon information gathered through the process accurately reflect distinctions among teachers. One method for establishing criterion validity is to test the results gained through the assessment system against another measure of the skills of interest. Where comparable measures do not exist, the collective judgment of representatives of the teaching profession may serve as criterion. In other words, those teachers considered competent in the judgment of other professionals should also be identified as such by the assessment system.

For construct validity, the system must demonstrate that an underlying factor or construct of competence is, in fact, being measured. Construct validity can be demonstrated when the decisions of (1) multiple trained evaluators, (2) judging multiple sources of relevant information, (3) on the basis of criteria and processes included in the assessment system, (4) converge to define an underlying factor or construct (Borich, 1977). Those sources of information commonly include direct classroom observations; interviews with peers, supervisors, and the teacher being evaluated; surveys and questionnaires answered by students, peers, supervisors, and parents; and portfolios or other documentation. All of these sources, evaluated by a team of trained, reliable evaluators, form a picture of the teacher's competence or lack of competence.

How to Measure Reliability

Reliability means the consistency of results recorded with the same instrument on different occasions. Reliability is also commonly defined as the level of agreement achieved by two or more assessors, observing the same teacher at the same time and recording information using the same instrument (Borich, 1977; Evertson & Holley, 1981). However, Medley, Coker and Soar (1984) consider this attribute of the system not as a measure of reliability but as a measure of rater agreement. Whether considered as a measure of reliability or as a measure of interobserver agreement, the degree to which two observers code the same behavior for the same teacher, on the same occasion, is a matter of technical importance and, in a state-mandated assessment system, a matter of political interest.

Interrelated agreement is a function of clarity of definitions and of the training of evaluators because the reliability of the score is affected by the error associated with uncontrolled variables such as time of day or year, subject matter, or teacher or student characteristics. Reliability across time refers to stability of behavior at different times of day or year as measured by the same instrument with the same students and for the same subject matter; reliability across subject matter refers to stability of teacher behavior when teaching different subjects to the same group of students; and reliability across student characteristics refers to stability of teacher behavior when teaching different students the same subject. Each of these variables must be considered when measuring teaching behavior. Whether teacher behavior is stable enough to produce valid and reliable estimates of teacher skill and knowledge sufficient for personnel

evaluation is a significant question (Stoldosky, 1984). Concerns for reliable assessments are often addressed by requiring multiple measurements by multiple assessors using a sufficient number of items. Research has shown that reliability is increased with the addition of evaluators; however, at some point the increase in reliability is marginal and may not be cost effective (Capie, Cronin and Yap, 1985).

Freedom from Bias

One fundamental question concerning the validity of the assessment system is whether or not it is free from bias against any identified group. That identification can be related to gender, race, or even teaching field or teaching assignment. If the system consistently produces higher scores for elementary teachers or for English teachers, then the assumptions that the selected teaching skills are generic may not be correct, and the legality of using the system will be challenged. In this case, the process used to establish content validity takes on great importance. Were the appropriate variables--gender, ethnicity, level of assignment (elementary & secondary) and subject areas--represented during the process? Did representatives of appropriate groups confirm the applicability of the selected teaching skills to all teaching assignments? Were these representatives asked appropriate questions and was the process of analysis adequate? Excellent documentation of the process of development is required when these and other pertinent questions are asked.

Procedures

Developers must decide how to measure competence and how the information is to be used. The goals and purposes upon which the system is based will guide decisions about procedures. Some of the crucial procedural issues are:

1. *Relative balance of assistance to assessment.* If the purpose of the induction program is to provide support and guidance with emphasis on formative evaluation, then the assessment system must provide for timely, focused feedback delivered by someone with a high level of interpersonal and supervisory skills. However, if the purpose is to make summative decisions about certification, the need for timely feedback will not be emphasized in the system, and supervisory and interpersonal skills are not as critical.

2. *The qualifications and roles of the evaluators.* If the purpose of the induction program is to support the beginning teacher, then logically the principal as instructional leader will be one of the evaluators. Literature supports the concept that the evaluator should be at least as skilled as the person being evaluated. If the principal does not meet that condition, then the assessment system should provide for an additional evaluator with expertise; a curriculum coordinator would be a reasonable choice to serve as an evaluator in this case. Another alternative is for the state to employ an outside evaluator for the purpose of conducting evaluations within a region of the state. This will ensure that minimum standards are met from the state's perspective; however, training and funding a cadre of state evaluators entails considerable expense. One drawback to this approach is that little ongoing interaction would be expected between the state evaluator and the beginning teacher, and when the focus is on assistance rather than assessment, this approach works against that goal.

   Much discussion in the literature has focused on the fundamental conflict that occurs when the assistance and assessment functions reside in the same person. If funding and other resources allow, the assistance-focused program

should provide for assigning these functions to different individuals to the extent possible. The beginning teacher may be reluctant to expose weaknesses and to seek assistance from the person charged with making the summative evaluation. (Griffin, Barnes, Hughes, O'Neal, Defino, Edwards & Hukill, 1983).

3. *How often, for how long, and when evaluations occur.* Nothing will cause more discussion and raise anxiety levels faster and higher during the development process than these questions. Some experts support brief observations spaced over a long period of time, while classroom teachers have generally supported bell-to-bell observations with some restrictions on the number and frequency of classroom observations. However, the number and length of observations must be balanced against the requirements placed upon evaluators' time and the amount of interference caused in the classroom. Another question raised related to observations is whether teachers receive fair evaluations on all instructional days: should the day before a holiday be exempt from observation? If this is the case, should Fridays be exempt? What about the first day of school? the last day of school? For these very specific procedural questions, little research exists to guide developers even though intense interest will be generated during the decison-making process.

Potential Threats to the System

The assessment system must be constructed to minimize potential threats to its reliability and validity. As discussed earlier, the process followed during the development dictates to some extent the legal and professional defensibility of the final product. Among the threats to the system is the halo effect, i.e., when a score in one area of the assessment system contaminates scores in unrelated areas. This problem can be addressed by clear operational definitions of the concepts involved, adequate training for evaluators, properly constructed instruments, and a process for monitoring the performance of evaluation.

Another common problem is the tendency of evaluators to afford more recent events greater influence in an evaluation. This is partially an artifact of the limitations of the evaluator's memory given the complexity of daily life in the school. What happened at the first of the year is often simply forgotten by April. In addition, the human tendency to be positive and to avoid negative comments leads to selective forgetting and to an emphasis on what is good. In fact, avoiding evaluation activities, if at all possible, is another common tendency (Barnes, 1985). One possible solution is to establish scoring periods and to require that observations and evaluations be completed within a specific period. The results from each period would then stand alone and be treated as equivalent samples of teacher competence. Other opinions support a more supervisory approach where early observations are formative and improvement is rewarded. Controls in this approach in the "recency " phenonemon are less assured.

Summary

The adequacy of criteria, the process for gathering information, and the skill of the evaluator each contribute to the validity and reliability of the evaluations. A severe weakness in any of these areas will destroy the confidence placed in the system by those being evaluated and will doom the system to eventual failure. Appraisee confidence in the fairness and equity of the system is the *sine qua non* of a successful evaluation system.

Implementation Issues

Local Resource Allocation

The design of the assessment system will affect, to some extent, the daily working of the school and the allocation of state, district, school, and classroom resources. If the principal is to serve on the assessment team, or teams, then other responsibilities will have to be delegated to other persons or may fall into neglect. If mentor teachers are to be assessors, then funds must be dedicated for substitutes, or other arrangements must be made for the mentor's classes during observations. Common practice has been for duties to be added to the normal routine without adding additional resources when new induction programs are implemented.

Time will, of course, become the most precious resource. To some extent, the impact of the assessment system upon time will be determined by the methods of observation and data recording required by the system, by the level of expertise of the evaluators, and by the procedures required in the operation of the assessment system. If scripting or some other form of narrative recording is used, then the evaluator will spend time later translating results to an evaluation form. Some systems, such as that used in Florida, use data-capturing methods which do not require extensive translation, and in Tennessee, the evaluator produces a data record which is scored and interpreted by computer. In the order discussed, these systems move from the most time-consuming to the least time-consuming for the evaluator in terms of time spent after an observation in translating notes to evaluation.

Training Issues

The amount of time required to train appraisers to an acceptable level of reliability will also be impacted by design decisions. As a rule of thumb, the more judgment required of the evaluator, the more time required to reach an acceptable level of consistency among evaluators. If the evaluator must recognize examples of teaching behavior and count their occurrences, training involves presenting examples and non-examples of concepts until the parameters of the concepts are engrained in the evaluators' repertoire. This assumes that teaching can be assessed by a series of discrete decisions which, in the aggregate, provide a representative sample of teaching behavior.

If the evaluator must not only decide whether a collection of behaviors is an example of the behavior of interest but also rate the behaviors on a scale from poor to excellent, then training becomes more complicated (Borich, 1977). Decisions for rating scales usually combine the dimensions of frequency and quality in the different rating points. For example, a "three" may be described as "usually performing a behavior at an acceptable level of performance." A "five" will be described "always performing at an exceptional level of performance." Training evaluators to come to some acceptable level of agreement on a rating scale requires time spent exposing evaluators to samples of behavior which offer almost infinite variations of behavior frequency and quality. This approach is usually more time consuming and more expensive, depending upon the level of expertise brought to this training by the majority of trainees.

Hidden Costs

The assessment system will carry with it numerous hidden costs which must be absorbed by all levels of the educational system. Some of these costs will diminish over time as participants become more efficient and proficient; others will diminish as the system is adjusted and streamlined in subsequent versions. However, those hidden costs during the initial years of implementation are likely to be substantial--concentration and energy diverted from other educational goals, or additional paper work generated because participants feel the need to

document everything, or the efforts spent by teachers trying to exceed the minimum requirements. Some of these hidden costs can be minimized by training and by accurate information; others will be much more difficult, and probably impossible, to control. These tendencies indicate a need for developers to be mindful of the possible consequences, to weigh design decisions against potential implementation problems, and to work for efficiency, control of paperwork, and moral support for teachers and evaluators.

Experience with similar programs has demonstrated a drive, bordering on complusion, within some of the teachers to achieve perfection in assessment. This occurs even when the decision to be made is a criterion-referenced decision rather than a norm-referenced decision and when teachers are being compared against a standard rather than against other teachers (Oral testimony received by the Texas State Board of Education on February 6 and 8, 1986). Trying to reduce anxiety and to control the drive for perfection may be misinterpreted as trying to lower the performance standards; at the same time, developers should anticipate this problem and be prepared to make adjustments throughout the development process.

Several states using statewide assessment systems have experienced this particular problem most often with the portfolio, a collection of samples of materials produced by the teacher or students and documentation of professional growth activities. In each state, adjustments have been made after implementation to respond to the problems associated with the portfolio, such as excessive time spent on lengthy lesson plans or the generation of trunks full of questionable documentation of professional activities. In Texas, this component was simply removed entirely from the system.

Limitations

One danger in implementing an assessment system is that the assessment system may eventually drive the educational system. Teaching to the test is one example of this phenomenon where teachers begin to tailor their teaching to the assessment system. When the system is soundly developed and able to fairly assess a wide variety of teaching styles and methods, that may not be such a problem. When the system is narrow in its vision of teaching, then the professional decisions of the teacher suffer by its restrictiveness. It is only natural to try to excel in an assessment, and the incentive will certainly exist with certification as the reward for such a directed effort. In fact, performing to the test is probably impossible to prevent unless the criteria for assessment are not revealed. To evaluate without making the teacher aware of the criteria might be defensible in a norm-referenced situation but is contrary to the basic philosphy of a criterion-referenced system. The solution lies in a soundly developed system, one developed with broad input from those with expertise in teaching and reflecting the best teaching practice and the best from the available research.

Despite the efforts of the designers of the assessment system, it is impossible to create a perfect system. With enough creativity and persistence, those so motivated will discover shortcuts and mechanisms to circumvent the best of intentions. Self-appraisals designed for self-analysis and reflection will be duplicated and circulated throughout the faculty; evaluators will conduct "preobservation conferences" during faculty meetings; teachers will design a "throw down" lesson plan to be used whenever the evaluator darkens the doorway. These phenomena make securing the support and trust of the teachers and evaluators early in the process very important. The bottom line is that, at some point, teachers must trust the assessment system, must participate in good faith, and must accept the professional judgments made by the evaluators (Nettles, 1986).

Relationship to Preservice and Inservice Teacher Education

Opportunity to Learn

The concept of "opportunity to learn," which has most commonly been applied to paper-and-pencil competency tests, has relevance to the use of an assessment system for beginning teachers. If preservice teacher education programs within the state do not incorporate the definitions, concepts, and skills measured in the assessment system, then beginning teachers may legitimately question whether they have had an adequate opportunity to learn the skill necessary to be successful in the initial years of teaching. Designers are cautioned to plan for enough lead time to notify all current preservice students of the new requirements for certification and to train them in the skills and knowledge to be assessed. Notification may be accomplished through such media as catalogues, program updates, syllabi, or public announcements. All such efforts to notify students must be documented for legal purposes.

A plan to integrate the assessment system into preservice preparation should be included in the overall design for implementation. The plan would include training, not only for preservice students but also for the college faculty. College faculty need a level of training comparable to that of the local evaluators so that concepts are applied consistently at the college level and in the local districts during student teaching and beyond. In fact, college faculty may be involved in the assessment of the beginning teachers if the program design provides for their participation as account ability as is the case in the Oklahoma induction programs (Hoffman, Griffin, Edwards, Paulissen, O'Neal Barnes and Verstegen, 1985).

Induction programs by their very nature serve as quality control indicators for teacher education programs. Although graduates from different colleges are not formally compared, these comparisons will be made informally by those in the profession, by the public, and by policy makers. The reputation of the college or university teacher education program will be enhanced or diminished among administrators and teachers by the performances of its graduates. Eventually, colleges and universities will be pressured to adjust to the assessment system, especially if a high percentage of their graduates are not successful. The alternative could be the loss of program approval from the state.

Inservice Education

Statewide induction programs usually include a training program for local district personnel serving as mentor teachers, evaluators, or both. In some cases, the training has accomplished only awareness and orientation to the program and assessment system; in others, local personnel are exposed to rigorous training in the assessment system to prepare for special roles in the induction program. In Tennessee, master teachers have been selected to temporarily leave the classroom, to undergo training, and to serve as evaluators employed by the state (Christiansen, 1984). Including local personnel in the training program fosters a common professional language among beginning teachers, evaluators, and college and university personnel. In short, the induction program audits offer avenues for continued professional growth for the inservice teacher and local administrator in one of the most vital movements currently underway in education.

Conclusion

This paper has presented issues related to the development and implementation of an assessment system for a statewide induction program. Throughout the paper, the perspective has been that an assessment system will not operate in isolation and should not be developed in isolation. While critical attention must be given to the technical requirements of an assessment system, the relationships between the state and local agencies and between preservice, induction,

and inservice education should not be ignored. To do so could result in an assessment system that commands little or no support from the teaching profession.

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A STATE PROGRAM FOR THE INITIAL YEAR OF TEACHING

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The Illinois State Board of Education, at the direction of a section of Senate Bill 730, has initiated a preliminary investigation of programs designed to affect positively new teachers in Illinois. As part of this investigation, the Board contracted with the University of Illinois at Chicago (UIC) to prepare substantive background information as the state considers programs for new teachers.

As part of the process, UIC commissioned a set of papers that present points of view related to new teacher initiatives. The papers were focused by a conception of such initiatives that includes attention to process dimensions, content considerations, relationships among assessment and assistance directions, and context issues. These papers form the bulk of this volume and are presented here as a means to focus discussion at state levels and in other educational settings.

The papers were presented at a conference held on the UIC campus on September 22, 986. The conference's primary purpose was to engage state stakeholders in discussions aimed at discovering whether the points of view of the paper authors were reasonable ones, what issues had been neglected, which implementation issues might be most problemmatic, and whether important considerations had been neglected. The 100 conference participants, including teacher educators, deans of education units, teacher organization leaders, and state policy makers, engaged in lively discussion and raised important issues for further consideration.

Subsequent to the conference, the authors of the papers met with the small UIC staff for two days to reflect upon the discussions at the conference, refine their ideas, and suggest directions for a new teacher program in Illinois. This event provided the opportunity for the experts to interact around important topics and, in the next few weeks, revise the ideas and recommendations advanced in their individual papers. The papers that appear in this volume are the products of that reflection and revision.

The primary purpose of this chapter is to set forth a number of recommendations about how the state might act in relation to developing an Illinois Initial Year of Teaching Program. These recommendations give attention to planning that must be engaged in as well as specific features of an initial year of teaching program that are believed to be essential. The recommendations are preceded by a brief presentation of the background against which any consideration of new teacher programs must be understood.

Background

Teaching, schooling, and teachers in America are receiving the highest level of attention in memory. That attention is focused directly upon the important relationship between teaching and learning and is calling into serious question whether or not the nation is meeting social obligations for the creation of an educated citizenry. But, there has been a significant shift of the discourse from "the schools are failing," to "how can the schools do better?" The rhetoric of doomsday scenarios has changed to one of proposals for significant and serious change.

There are proposals for changing the ways that schools are organized, how they are managed, forms of teacher assessment and evaluation, how students should be grouped, what instructional materials ought to be used, under what conditions parent involvement is appropriate, and how teachers should be rewarded. The proposals are coming from policy makers in the nation and the states, from school system officers facing challenging shifts in the nature of student populations, from business and industry leaders who fear a crisis in competence of employees, from philanthropic organizations, and from the educational establishment itself. It is of great interest and even greater importance that the proposals for change are more complementary than antagonistic, more mutually supportive than competitive. This conjunction of beliefs about the need to make significant changes along with tentative agreement about the nature, if not the precise specifications, of some of those changes has enormous potential for meaningful action toward improving the nation's schools.

Central to the debates about quality educational programs for our children and youth are considerations about the character of the teaching force, who teachers are and what they bring to teaching-learning situations. Recommendations pointing to making teaching more effective, in terms of student outcomes, or more satisfying, in terms of teachers' feelings about themselves, often miss the mark because of their simplistic assumptions about the nature of teaching activity. Although many citizens and some educational professionals persist in believing that teaching is a relatively simple, straightforward, and rationally linear activity, such is not the case. Teaching is complex, dependent upon split-second decision making in some instances and carefully conceptualized planning in others. It is the orchestration of a broad array of classroom components--knowledge, instructional materials, differing student ability levels, use of time and space, values, student dispositions toward learning, relationships among peers, and many others. In the main, teaching is the management of an uncertain environment and requires a solid understanding of the nature of that environment and skill in selecting those teaching acts that fit the classroom situation.

Despite our growing acknowledgement of the complexity of teaching, there still exists the notion that, somehow, if teachers just got it right in their college or university preparation programs, many of the barriers to delivering quality instruction would be solved. What is ignored in this view is the enormous power of the first years of actual teaching experience to influence a teaching career or, in some cases, to provide sufficient evidence to new teachers that they should leave teaching and seek career fulfillment in other fields. This power of the first years is rooted in a number of interacting phenomena, including the reality shock of moving from a supervised student teaching situation to relative autonomous teaching, the nature and quality of assistance for starting off effectively, the presence or absence of true colleagues, the qualitative aspects of the school and classroom assignments given to the new teachers, the student population's willingness to learn, access to necessary professional and social support, the character of school leadership, curriculum requirements, relationships with parents and community members, and others.

A strong case can be made to support the contention that teacher preparation programs in colleges and universities prepare effective student teachers but ensuring that these students of teaching become successful teachers is more problemmatic.

State legislatures and education agencies are demonstrating their concern for assuring quality instruction from new teachers by the development and implementation of programs for new teachers. These programs, in general, focus on articulating expectations for new teacher success, requiring support from state, district, and school sources to contribute to that success, and assessing the effectiveness of new teachers' instruction as well as the support programs designed to affect it. State programs vary in their intentions, their rationales, their activities, and their outcomes but they are all concerned with improving the professional conditions and teaching outcomes of new teachers.

Planning and Implementing an Illinois Initial Years of Teaching Program

The recommendations that follow are based in large measure upon the substantive and detailed issues presented in the other chapters of this volume. They rest upon the assumption that Illinois will make a major investment in its schools through the development, support, and maintenance of programs to assure that new teachers in the state's schools move into their professional roles with appropriate professional guidance, assistance, and monitoring. Further, these recommendations recognize that new teacher programs can be major influences upon all professional staff in schools, experienced teachers and administrators as well as novice teachers, and that they should be conceptually coherent with other staff development efforts.

A major assumption underlying these recommendations is that it is the responsibility of the local district and individual school to initiate newcomers but that the State of Illinois has the right and the responsibility to require that certain features of that initiation be present. This assumption is strengthened in direct proportion to the financial investment the state makes in local programs, and the investment should be a considerable one.

The recommendations that follow are segmented into a number of categories, for convenience's sake. It should be understood, however, that these categories and the recommendations are interactive; they are seen as being mutually supportive and reinforcing. Some of the recommendations focus upon issues that must be resolved, others on items that seem beyond question. Even though some are tentative and lacking in precision, the constructs that they represent are believed to be of sufficient importance that they deserve attention.

Recommendations

The State of Illinois has a considerable influence upon schooling, teaching, and teachers. This influence is demonstrated through the implementation of requirements for teacher preparation programs, standards for teacher certification, mandates for curriculum content, reimbursement formulas, and others. It is recommended that the state now exert influence upon the introduction of teachers to teaching through the institutionalization of the Illinois Initial Years of Teaching Program.

The overall intentions of the program would be to provide the citizens of Illinois with the best possible assurance that new teachers are qualified to teach their children, that new teachers will commit themselves to the profession of teaching for longer than a few years, and that these teachers will develop a disposition toward teaching that is characterized by a search for excellence.

Recommendations are advanced below. The sets of recommendations are preceded by the questions that prompt them.

1. What are the expected outcomes and supporting conceptualization of a new teacher program?

   The outcomes of an initial years of teaching program should be to (a) guarantee that new teachers demonstrate outstanding classroom and school practices commensurate with their standing as novices, (b) ensure that new teachers develop a commitment to remaining in teaching, (c) provide evidence that new teachers are concerned more with excellence than with minimum competence, and (d) enrich intellectually and practically the schools in which they are carried forward.

The conceptualization that supports these outcomes includes the belief that new teacher programs can focus on the novice while, at the same time, alter positively the conditions of schools in which the novices continue to learn to teach. This alteration will depend for success on the infusion of appropriate knowledge, the systematic interactions of colleagues over issues of mutual importance, the distribution of appropriate incentives and rewards, the careful monitoring of progress, and a sense of shared responsibility for student learning and other indicators of teacher and school success. There is also the assumption that beginners should be thought of as just that, beginners, and that expectations that might be appropriate for veteran teachers are not realistic for the newcomer to a profession. This attention to differentiation between the newcomer and the veteran, however, is also tied to the expectation that the newcomer will commit himself or herself to becoming an excellent teacher over time and that this process of becoming will lead to the demonstration of ever higher levels of teaching effectiveness, and will not depend upon a set of minimum standards for staying in teaching.

2. What relationship should a new teacher program have to certification?

It is recommended that new teachers be provisionally certified and only permanently certified after there is evidence of (1) successful completion of an approved program of teacher preparation, (2) satisfactory responses to the proposed teacher testing program, and (3) successful completion of the Illinois Initial Year of Teaching Program, such latter evidence and related recommendation to be forwarded to the State Board of Education by a district officer with responsibility for implementation of the IYT Program.

It is recommended that a new certification endorsement be created, such endorsement for the purpose of verifying that the holder has the requisite knowledge and skill to serve as a school-based teacher educator, with major responsibilities for working with new teachers (i.e., a mentor for new teachers).

3. What mechanism can be created by the State of Illinois to ensure that an Initial Year of Teaching program reflects the knowledge and concerns of those with the greatest stake in having a successful program? How can sufficient evidence to support institutionalization of a program be accumulated?

It is recommended that the Illinois State Board of Education be responsible for convening a planning group with representatives of key constituent groups for the purpose of developing the broad outlines of an Illinois Initial Year of Teaching Program. This group would advise ISBE on the scope, magnitude, and components of the IYT Program. It would also advise ISBE on the preparation of a Request for Proposals that would result in the field test of 3 to 5 model programs. The field test results would be used by the planning group to advise ISBE on the specific characteristics of a statewide IYT program. The present volume should serve as a primary resource to the planning group as should the results of the current (1986-87) pilot program funded by ISBE.

It is recommended that the planning group be composed, at the very least, of representatives of the major teacher organizations, members of the faculties of at least 5 teacher education institutions, at least 5 building and district level school administrators, and 2 members of the ISBE. Members should be selected because of their interest in and knowledge about the topic rather than because of

their executive or elected status in their organizations. The work of the committee should be supported by appropriate ISBE staff and consultants as needed.

It is recommended that serious consideration be given by the ISBE and the representative planning group to the following proposals for inclusion in any conceptualization of the Illinois IYT program; they could form the core of requirements for implementation in pilot programs.

- the ISBE, in consultation with expert practitioners and scholars, has the primary responsibility for providing specifications of what should be the content of the various model IYT programs that are tested for effectiveness. Candidates for inclusion are (1) findings from studies of effective teachers, (2) considerations of cultural and ethnic variables as they relate to teaching and learning, (3) teacher decision making, (4) curriculum planning, (5) testing and evaluation of students and of instructional programs, (6) collegial/group school problem solving/action research, (7) the school as a workplace, (8) home-school relationships, (9) the professionalization of teaching, and (5) working with "at risk" children and youth.

- the planning group and the ISBE should consider developing a profile of schools into which first year teachers should and should not be placed. The "should" profile would give attention to those school context variables that are associated with teacher growth and improvement (e.g., participatory goal setting and decision making, professional collegiality and mutual problem solving, principal-teacher collegiality, etc.). The "should not" profile would give attention to those school context variables that are associated with teacher frustration and defeat (e.g., teacher isolation, teachers treated as automatons, the lowest achieving students, lack of safety, multiple preparations in high school subjects, etc.). The use of these profiles would determine into which schools new teachers could or could not be placed.

- the planning group and the ISBE should require that any plan for field-testing an IYT program provide for the release of new teachers, and experienced teachers who work with them, from classroom responsibilities for the purposes of observation of other teachers, discussing concerns, solving problems, sharing effective practices, and similar professional opportunities for professional learning. At a minimum, this release time should be for the equivalent of 1/2 day per week.

- the field-test plans must include the adoption, adaptation, and/or development of print, video, and other materials to be used in the proposed program. This material might be in the form of videotapes of classroom practices for critique and analysis, in the forms of written cases as used in law education, in the forms of self-study inventories to provide opportunities for reflection, and others. The intention here is to have available necessary support materials upon the adoption of any feature of a trial program as part of the Illinois IYT effort. The reproduction of such materials would be the responsibility of the ISBE and an equitable distribution system would also be developed by ISBE.

- any trial program must include a concept of assistance. This might take the form of a single mentor who is matched with a new teacher, it might be the creation of a team of persons with differing skills and perspectives to work

with a new teacher, or some other configuration. The aim is to create a more supportive human environment for continuing to learn to teach and to provide others in that environment with opportunities for their own professional growth.

- any trial program must provide direct instruction to persons charged with assisting new teachers. This instruction should include attention to the distinctions between child and adult learning, problem solving techniques, analysis and reflection, action research, technical assistance provision, and theories of helping. It should also give precise attention to ensuring that the person who assists is widely and deeply knowledgeable about district and school expectations for teachers, situation-specific issues, available technical resources, and the school as a workplace.

- field test programs must plan for and demonstrate systematic and ongoing relationships with higher education institutions. The nature of the collaboration should be both advisory and participative, that is, higher education faculty should be involved in planning for and carrying out programs, with particular attention paid to appropriate use of knowledge. This involvement must be demonstrated to be ongoing and developmental, rather than another manifestation of conventional consultant-type interactions.

- field test programs should demonstrate how they plan to attend to the core features specified by ISBE in consultation with relevant experts and the planning group, as well as how they plan to work with new teachers around specific situation-specific issues of concern to local educational leaders. The intention here is to focus the decision makers' attention on the ways a new teacher program can enrich their own teaching-learning environments rather than just respond to a state mandate.

- for purposes of awarding pilot program support and for the purpose of planning for a statewide IYT program, ISBE should determine through either experimentation or best judgment the appropriate organizational mass required to support an IYT effort. The state has a large number of school districts that have only a small number of schools, some only one. This is not seen as advantageous to an IYT program, partly because of financial constraints associated with small size and partly because of limitations of intellectual and professional resources that often accompany small numbers of teachers and administrators in one district. Attention should be paid to district size, districts working together, use of Educational Service Centers as coordinating and delivery mechanisms, and other innovative organizational configurations. The pilot programs could be selected because of their differential attention to this issue and because the field tests promise to suggest which resolutions are most powerful in increasing the success of a program.

4. What levels of support for a new teacher program should be assumed by the state and by local districts?

   - the State of Illinois has a considerable stake in being as certain as possible that the educational enterprise is successful. Assuring this certainty will call for an equally considerable investment. Local districts share this

responsibility and its related costs. An Illinois IYT program should call upon local districts to demonstrate a level of intestment commensurate with the responsibility. Likewise, the State should contribute to promoting the success of a mandated program rather than only forwarding pronouncements, rules, and regulations. As a rule of thumb, it seems reasonable for the State to assume the costs associated with those IYT activities that go well beyond "business as usual." These activities might include reimbursement for release time, assuming the costs of providing high quality video, print, and other materials, selecting, appointing, preparing, and using an assessment cadre for evaluating local efforts and new teacher competence, and others. The issue of support will be an important one when the dimensions of the Illinois IYT effort are determined, but until those specific issues are decided it is not possible to advance a formula. Of course, for the pilot program field tests suggested above, the State should provide sufficient support to be certain that the test data can be used to formulate the statewide program.

5. What issues of evaluation and assessment should be given attention in an IYT program?

   - any programmatic effort as large as a statewide program for new teachers should be given rigorous evaluative attention. For the pilot programs recommended above, persons submitting proposals should be required to include an evaluation plan focussed on the degree to which purposes are achieved and upon the relationship of program activities to that achievement. In addition, an independent evaluation, not connected to any of the pilot programs, should be commissioned by the ISBE. This independent effort would be for the purpose of providing a systematic evaluation of planned variations across sites, using a comprehensive methodology, for the purpose of determining which variations are more desirable for statewide implementation than others.

   - the assessment of the degree to which new teachers meet the expectations set for them must be given attention. Any pilot program that is selected for implementation must include in its plan the development, adoption and/or adaptation, and evaluation of this assessment procedure. It is recommended strongly that these assessment procedures give serious attention to issues beyond minimum competence, such as collecting evidence as to the new teacher's disposition toward professional growth and development toward a concept of excellence. This is not an easy conceptual or methodological task but it is one that is seen to be of the utmost importance so that Illinois can avoid the pitfalls related to institutionalizing the notion that "good enough" is what is expected of new and experienced teachers. It is likely that the pilot programs will not develop "the" Illinois new teacher assessment procedure. What they will provide is some evidence of the utility of features of such a procedure that can be modified by the ISBE, probably with the assistance of an external contractor expert in these tasks.

6. What is a reasonable expectation for implementing an Illinois IYT program in terms of time?

   - it is strongly recommended that the ISBE and other policy bodies in Illinois establish a timeline that gives careful consideration to the necessity to create a reliable knowledge base upon which an IYT program can rest. This

knowledge base should include the continuation of commissioned position papers from experts, rigorous assessment of other state programs that have been in existence for a number of years, development of a comprehensive conceptualization for the purpose of providing field tests of program features, examination of the results of field tests, and gradual implementation of the components of a statewide program. Accompanying all of these activities must be a concerted and serious-minded effort aimed at the mutually reinforcing purposes of keeping appropriate stakeholders informed, gathering relevant opinion and fact, and building professional and lay support for the program.

- A tentative timeline and agenda might be:

Spring, 1987 to January, 1988	Assessment of existing programs Organizing and convening planning group Development of initial conceptualization for field tests Preparation of request for proposal for field tests
Winter, 1988 to June, 1988	Solicitation, critique, and award of field tests
June, 1988 to August, 1989	Implementation and evaluation of field tests Independent assessment of field tests
September, 1989 to June, 1990	Examination of field test results Development of relevant supportive materials Development and partial testing of teacher assessment and program evaluation procedures
August, 1990	Phased implementation of components of the statewide program

Conclusion

This paper has presented a brief background of the purposes and activities that were central to satisfying the conditions of a contract between UIC and the Illinois State Board of Education that focussed on providing substantive background material for considering planning and implementing an Illinois Initial Year of Teaching Program. A number of recommendations were advanced. The recommendations included issues of content of an IYT program, context considerations, planning processes, and implementation. A phased program of careful consideration of alternatives and gradual institutionalization are central to the recommendations.

The initiation of new teachers into a profession is very different from the socialization of workers to a job. This difference is reflected in the attempt here to urge policy and decision makers to move deliberately and rationally, rather than quixotically and expediently. A number of states already have programs in place; we can learn from these examples without adopting them for use. A growing body of scholarship has accumulated around the issue of teaching and teachers; we should be deeply familiar with that knowledge. A number of serious proposals for action are available for scrutiny; we must examine them carefully. Although developing systematic and intellectually rigorous programs for ensuring teacher quality is of vital importance

to our state and the nation, we must not let that importance overshadow the need to work from evidence and with reasonably high expectations for success. This policy of gradualism is considered to be the highest priority recommendation in this chapter.

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